C.44856

COUNTY BOROUGH OF PRESTON.

P P

REPORT

OF THE

Medical Officer of Health

on the Health of the Borough
for the year

1927.

PRESTON
R. SEED & SONS, Printers, 43 Guildhall Street
1928.

COUNTY BOROUGH OF PRESTON.

REPORT

OF THE

Medical Officer of Health

on the Health of the Borough
for the year

1927.

PRESTON
R. Seed & Sons, Printers, 43 Guildhall Street
1928.

Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

https://archive.org/details/b29998256

HEALTH COMMITTEE (1927-28).

Chairman: The Right Worshipful the Mayor, Mr. Alderman Richard Durham.

Vice-Chairman: Mr. Alderman T. H. C. Derham, M.B., C.M.

Mr. Alderman H. Fazackerley.
Mr. Councillor F. W. Collinson, F.R.C.S.
Mr. Councillor R. C. Handley, J.P.
Mr. Councillor Morris.
Mr. Councillor J. Herbert.
Mrs. Councillor A. M. Pimblett.
Mr. Councillor T. C. Rainford.
Mr. Councillor Peet.
Mr. Councillor A. P. Adkins.

MATERNITY AND CHILD WELFARE COMMITTEE.

Chairman: Mrs. Councillor A. M. Pimblett.

The Health Committee, and Councillors Sergeant, Heaps, Ward, and Ramsey, with the following ladies adopted as Members:—

Mrs. Dunbar, J.P.
Mrs. Marsden, J.P.
Mrs. Todd, J.P.
Mrs. Lucas.
Mrs. White.
Mrs. Lees.

TUBERCULOSIS SUB-COMMITTEE.

Six Members of the Health Committee, with the following Members of the Insurance Committee adopted as Members:—

Dr. W. H. Pimblett.
Mr. W. Pemberton.

Staff.

F. A. Sharpe, M.D. (Lond.), B.S., D.P.H.
Medical Officer of Health, School Medical Officer, Port Medical Officer, Tuberculosis Officer.

James Walker, M.B., Ch.B., D.P.H., Vict.
Assistant Medical Officer, Clinical Tuberculosis Officer.

E.E. Critchley, M.B., Ch.B.,
Assistant Medical Officer, Maternity and Child Welfare Officer.

Richard Finch, F.R.C.V.S., D.V.S.M., Veterinary Officer and Officer in charge of Food Inspection arrangements.

W. H. Roberts, F.I.C., Borough Analyst.

Chief Clerk : W. Sharp.

Matron, Isolation Hospital : J. G. Booth.

Matron, " Chestnuts " Hospital for Consumption : F. Keene.

Health Visitors : M. M. Bottomley, E. A. Cooper, L. Ross, E. Park, D. Lafferty, J. Mortimer, R. Cole.

Tuberculosis Nurses : J. Edmondson, M. Cole.

Sanitary Inspectors : W. Baron, Cert. R.S.I. E. L. Crossthwaite, Cert. R.S.I. H. S. Holden, Cert. R.S.I. J. B. Morgan, Cert. R.S.I. W. R. White, Cert. R.S.I. F. Potter, Cert. R.S.I. J. B. Cook, Cert. R.S.I. T. Lindsay, Cert. R.S.I.

Report of the Medical Officer of Health.

To the Chairman and Members of the Health Committee.

THE RIGHT WORSHIPFUL THE MAYOR, MRS. PIMBLETT, AND GENTLEMEN,

I have the honour to submit to you the Annual Report upon the health of the Borough during the year 1927.

An impressive feature of the Vital Statistics is the new low level reached by the birth rate. Although the number of births is higher than that of last year, the considerable increase of population, as estimated by the Registrar-General, returns a rate per thousand considerably below the low rates returned in the war years.

Epidemics of Influenza and Measles have also adversely affected the death rate which, although not reaching the high figure of the year 1925, is higher than that of any year since 1919.

Influenza and associated pulmonary disorders account for the increase in the infant mortality which, with the exception of the year 1925, has been below 100 for a few years.

We occupy the unenviable and unusual position of having the second highest infant mortality among the 20 large towns of Lancashire and Cheshire.

The effect upon the death rate of the various causes of death is given in the body of the report. It is of interest to note that Cancer caused the same number of deaths among men and women, i.e., 78 and 89, as in 1926.

Dr. Walker reports upon Tuberculosis and expresses the opinion, to which all of us can subscribe, that the substantial gains are minimised and further progress hindered by the poor state of trade and the still remaining leeway in housing.

The Veterinary Surgeon reports upon the work in connection with the supervision of food, a subject of very great importance, and a duty carried out with commendable enthusiasm and skill.

Maternity and Child Welfare work is developing along lines made familiar in the last few years. The ante-natal centre is of great promise and is proving to be a success. There can be no doubt that the department's interest in a child should begin earlier than birth and our aim is here not only the welfare of a living child but its safe entry into separate existence with due care for the mother's well-being. The Committee will note that 20 per cent. of our children are born in maternity homes and at the principal ones—The Preston Royal Infirmary and Sharoe Green Lane—there is a carefully organised ante-natal centre working parallel with our own.

The routine work of the department, dealt with under appropriate sections, has been carried out in accordance with your desires and, I may say, faithfully and well.

The outstanding need of the Public Health Service is co-ordination of the various parts which go to make the whole. Maternity and Child Welfare, the School Medical Service and Tuberculosis have each been treated in the past as new accretions or growths upon the body politic. Each new service deals with the same child, visits the same house and wrestles with the same problems and yet they are each housed separately, manned by different staffs and co-operation although effective is only maintained in the teeth of ever-recurring difficulties.

Increasing experience only adds to the proof that our present system causes overlapping and is wasteful of accommodation and staff.

The first and essential requirement is the provision of a Central Office from which the whole of the work could be directed. This provided, the re-arrangement and merging of all health services to enable ONE health visitor to perform all the district visiting in her particular area could be obtained.

Thanking you, Mr. Mayor and members of the Committee for your continued goodwill and interest.

I am,

Your obedient Servant,

F. A. SHARPE,

Medical Officer of Health.

Cost of Services.

The following figures as to the cost of the Health Services are summarised from the annual report of the Borough Treasurer for the year ended March 31st, 1927 :—

	Expenditure			Income		
	£	s.	d.	£	s.	d.
Maternity and Child Welfare	6341	10	0	3631	4	5
Meat Inspection	950	2	6	135	14	3
Public Health	6946	12	0	1933	9	2
Disinfecting	1636	19	7	1297	7	6
Port Sanitary	473	2	5	131	1	2
Elswick Hospital	590	8	8	17	10	0
Isolation Hospital	7783	17	8	554	1	10
Venereal Diseases	1649	13	5	1343	3	6
Treatment of Tuberculosis	9889	1	0	5887	14	9
Contagious Diseases of Animals	254	6	6	26	5	0
Food and Drugs Act	406	18	0	...		
Medical Inspection and Treatment (Elem. Education)	4649	0	5	65	10	4
Medical Inspection (Higher Education)	155	0	0	...		
TOTAL	41626	12	2	15022	1	11

The figures include the grants from the Ministry of Health with regard to Maternity and Child Welfare, Venereal Diseases, Tuberculosis, Port Sanitation and the Medical Inspection of School Children.

The totals for the year ending March 31st, 1926, were as follows :—
Expenditure—£39,324 2s. 5d. Income—£13,128 2s. 0d.

I.—Natural and Social Conditions of the District.

VITAL STATISTICS SUMMARY.

Area in Acres	3,964
Population, estimated middle of 1927 ...	127,100

	1923-24		1924-25		1925-26		1926-27		1927-28	
Rateable Value	£598,748		£605,474		£613,007		£622,256		£633,122	
Sum represented by a penny rate	£2,150		£2,276		£2,320		£2,400		£2,400	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Total Rates levied ...	12	6	11	10	12	1	12	3	13	0
Rate for Public Health	0	8¾	0	8⅝	0	9¾	0	9½	0	10⅛
,, Highways ...	1	4½	1	4¾	1	5½	1	3⅞	1	7⅛
,, Scavenging ...	0	5	0	5⅛	0	5½	0	5⅜	0	5¾
,, House Refuse...	0	9½	0	9	0	9⅛	0	10¼	0	9¼
,, Sewerage ...	0	6	0	5⅞	0	6½	0	6½	0	6¾

	Males	Females	Birth Rate
Births—Legitimate ...	937	859	14.13
Illegitimate ...	42	54	0.75

Deaths—Nett ... 1,785. Rate 14.04

Number of Marriages—976. Marriage Rate—7.68.

Number of women dying in, or in consequence of, child birth :—

From Sepsis—3. From other causes—6.

Deaths of infants under one year of age per 1,000 births :—

Legitimate—105. Illegitimate—177. Total—109.

Deaths from Measles at all ages	43
,, Whooping Cough	18
,, Diarrhoea (under two years)	11

VITAL STATISTICS.

The following information is supplied by the Registrar-General :—

County Borough of Preston. Estimated Population—127,100.

The Vital Statistics of the various wards are set out in the table below. As will be seen, they vary very much from one another, and a reference to previous reports shews that they vary from year to year.

TABLE Ia.

Ward	Census 1921	Estimated Population, June, 1927	Nett Deaths	Rate per 1000 living	Births	Rate per 1000 living	Deaths of Infants	Infant Mortality per 1000 born
St. John's ...	11647	12501	187	14.96	181	14.48	18	99
Avenham	7155	7630	122	15.99	112	14.68	11	98
Christ Church	8474	9092	148	16.28	154	16.94	12	78
Ashton ...	9030	9583	95	9.91	102	10.64	7	68
Maudland ...	9641	10339	128	12.38	157	15.18	14	89
St. Peter's ...	11319	12324	183	14.85	200	16.23	28	140
Moorbrook ...	8736	9399	101	10.74	113	12.02	12	106
Park	14470	15548	223	14.34	208	13 38	31	149
Trinity	9684	10382	186	17.91	148	14.25	12	81
Deepdale ...	10743	12099	155	12.81	198	16.36	29	146
Ribbleton ...	9065	10214	137	13.41	217	21.24	19	87
Fishwick ...	7442	7989	117	14.64	102	12.77	13	127
Unknown ...	...	...	3	...	...	...	...	...
	117406	127100	1785	14.04	1892	14.88	206	109

Compared with 1926 there has been an increase in the number of deaths from Enteric Fever (0—1), Measles (0—43), Whooping Cough (1—18), Diphtheria (8—11), Influenza (26—102), Encephalitis Lethargica (3—6), Heart Disease (214—250), Bronchitis (95—131), Pneumonia (131—174), Other Respiratory Diseases (18—23), Acute and Chronic Nephritis (44—112), Other Deaths from Violence (40—55), and a decrease in those caused by Scarlet Fever (1—0), Meningococcal Meningitis (1—0), Tuberculosis of Respiratory System (102—100), Other Tuberculous Diseases (39—23),Rheumatic Fever (6—4), Diabetes (21—16), Cerebral Haemorrhage (89—77), Arterio-Sclerosis (111—76), Ulcer of Stomach (10—8), Diarrhoea (30—18), Appendicitis and Typhlitis (10—8), Cirrhosis of Liver (6—5), Puerperal Sepsis (8—3), Other accidents and diseases of Pregnancy and parturition (7—6), Congenital Debility and Malformation, Premature Birth (89—82), Other defined diseases (279—248), Causes ill-defined or unknown (19—4).

There were 16 deaths from Suicide compared with 11 last year and 10 in 1925. In the five years 1914-18 the average was 8.8 and in the succeeding five years 12.6.

There were 1,856 interments at the Cemetery.

The tables which follow deal with the Vital Statistics, and compare them with previous years and with other towns. They also illustrate the mortality in the various Wards. The figures supplied by the Registrar-General agree in the totals with those locally compiled, but differ slightly in detail.

TABLE Ib.

Year.	No. of Births.	Rate per 1000 Living.	No. of Infant Deaths.	Infant Mortality.	No. of Deaths.	Rate per 1000 Living.
1906	3317	28.49	665	200	2065	17.74
1907	3124	26.68	495	158	2003	17.10
1908	3309	27.56	516	156	1975	16.45
1909	3027	25.54	416	137	1721	14.52
1910	2812	23.58	438	156	1758	14.74
Average	3118	26.37	506	161	1904	16.11
1911	2726	23.25	473	173	1984	16.92
1912	2753	23.40	342	124	1972	16.76
1913	2888	23.95	462	160	2043	16.98
1914	2841	23.97	401	141	1873	15.80
1915	2546	21.48	395	155	2086	18.63
Average	2751	23.21	415	151	1992	17.02
1916	2315	19.36	254	109	1774	16.14
1917	2019	16.96	255	124	1660	15.46
1918	1906	16.07	213	113	1944	18.36
1919	2086	17.45	225	110	1760	14.72
1920	2984	24.43	301	101	1659	13.60
Average	2262	18.85	250	112	1759	15.66
1921	2811	23.44	316	112	1595	13.30
1922	2482	20.53	242	97	1662	13.75
1923	2426	19.11	238	98	1676	13.77
1924	2328	18.91	225	97	1714	13.92
1925	2174	17.69	286	131	1787	14.54
Average	2444	19.94	261	107	1687	13.86
1926	2160	17.39	195	90	1596	12.85
1927	1892	14.88	206	109	1785	14.04

Other deaths from violence numbered 55. They are set out in detail in the following table, where it is shewn that the largest single cause of accidental death is motor accidents, followed by works accidents, and drowning.

	Total	0–1	1–2	2–5	5–15	15–25	25–45	45–65	65–75	75 & over
Scalds	2	...	1	1	...	...	...	...	...	...
Burns	3	...	...	...	...	...	...	1	...	2
Drowning	5	...	...	...	...	1	2	1	...	1
Motor Accident ...	20	...	...	...	6	6	1	4	2	1
Works	8	...	...	...	...	2	2	4	...	...
Food Poisoning ...	1	...	...	...	...	...	...	...	1	...
Falls	5	...	...	1	...	...	...	2	2	...
Asphyxia whilst sleeping	2	2	...	...	...	...	...	...	...	...
Infanticide	1	1	...	...	...	...	...	...	...	...
Foreign body in windpipe	1	...	1	...	...	...	...	...	...	...
Accidental Strangulation	1	...	...	...	...	1	...	...	...	...
Murder	1	...	...	...	...	...	1	...	...	...
Railway Accident ...	1	...	...	...	...	...	1	...	...	...
War Injury	1	...	...	...	...	...	1	...	...	...
Cycle	2	...	...	...	...	...	...	2	...	...
Tram Car	1	...	...	...	...	...	...	...	1	...
Totals	55	3	2	2	6	10	8	14	6	4

TABLE Ic.

Vital Statistics of whole District during 1927 and previous nine years.

YEAR.	Total Population.	BIRTHS. Nett.		CIVILIAN POPULATION.	TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
									Und'r 1 yr. of age		At all Ages.	
		Number.	Rate		Number.	Rate.	of Non-resid'ts registered in the district	of Residents not regist'd in the district	Number	Rate per 1,000 Nett Births.	Number	Rate.
1918	118,595	1906	16.07	105845	1778	16.79	66	232	213	113	1944	18.36
1919	122,168	2086	17.45	117277	1619	13.55	66	207	225	110	1760	14.72
1920	122,133	2984	24.43	121950	1539	12.57	83	203	301	101	1659	13.60
1921	119,900	2811	23.44		1449	12.08	61	207	316	112	1595	13.30
1922	120,900	2482	20.53		1528	12.64	74	208	242	97	1662	13.75
1923	121,700	2426	19.11		1527	12.54	78	227	238	98	1676	13.77
1924	123,100	2328	18.91		1573	12.78	88	229	225	97	1714	13.92
1925	122,900	2174	17.69		1644	13.38	84	227	286	131	1787	14.54
1926	124,200	2160	17.39		1421	11.44	93	268	195	90	1596	12.85
1927	127,100	1892	14.88		1645	12.93	121	261	206	109	1785	14.04

Area of District in acres (Land and Inland Water)............ 3,964

Total population at all ages	117,406	At Census of 1921.
Number of inhabited houses	27,189	
Average number of persons per house..	4.31	

TABLE ID.

Causes of Death at Different Periods of Life during the Year 1927.

Supplied by the Registrar-General.

CAUSES OF DEATH.	Sex	All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—
ALL CAUSES	M	882	119	35	24	25	40	101	244	184	110
	F	905	88	35	27	25	36	89	215	222	168
1 Enteric Fever	M	...	...	..	...	...	...	...	...	...	...
	F	1	...	...	...	...	...	...	1	...	...
2 Small Pox	M	...	...	...	...	...	...	...	...	...	...
	F	...	...	...	...	...	...	...	...	...	...
3 Measles	M	22	8	6	6	2	...	...	...	...	...
	F	21	6	8	5	2	...	...	...	...	...
4 Scarlet Fever	M	...	...	...	...	...		...		...	...
	F	...	...	...	...	...	...	...	...	...	...
5 Whooping Cough	M	9	2	4	2	1	...	...	...	...	...
	F	9	3	4	2	...	...	...	...	...	...
6 Diphtheria	M	4	...	2	2	...	...	...	...	...	...
	F	7	1	4	1	1	...	...	...	...	...
7 Influenza	M	55	...	1	2	3	1	9	19	11	9
	F	47	...	3	3	...	2	6	11	14	8
8 Encephalitis Lethargica	M	4	...	...	...	1	2	...	1	...	...
	F	2	...	...	...	1	...	...	1	...	...
9 Meningococcal meningitis	M	...	...	...	...	...	...	...	...	...	...
	F	...	...	...	...	...	...	...	...	...	...
10 Tuberculosis of respiratory system	M	56	2	1	...	...	9	24	17	3	...
	F	44	...	...	3	3	19	14	5	...	...
11 Other tuberculous diseases	M	10	...	4	...	2	2	...	2	...	...
	F	13	1	1	...	3	2	4	2	...	...
12 Cancer, malignant disease	M	78	...	...	...	...	..	3	34	32	9
	F	89	...	...	...	...	...	10	48	18	13
13 Rheumatic Fever	M	2	..	..	...	...	...	1	1	...	...
	F	2	...	...	...	...	...	1	1	...	...
14 Diabetes	M	6	...	...	...	...	...	1	2	2	1
	F	10	...	...	...	...	...	...	7	3	...
15 Cerebral Hæmorrhage, &c.	M	37	...	...	...	...	...	2	8	15	12
	F	40	...	...	...	...	...	2	8	20	10
16 Heart Disease	M	97	...	1	...	1	3	3	43	26	20
	F	153	...	...	...	1	2	16	48	55	31
17 Arterio-sclerosis	M	40	...	...	...	...	...	...	12	19	9
	F	36	...	...	...	...	...	...	5	17	14
18 Bronchitis	M	61	11	2	2	...	...	5	13	16	12
	F	70	5	2	1	...	...	3	11	22	26
19 Pneumonia (all forms)	M	95	22	11	5	5	4	20	16	11	1
	F	79	17	10	6	4	5	3	13	15	6
20 Other respiratory diseases	M	11	1	...	1	...	...	1	5	1	2
	F	12	1	...	1	1	...	1	2	5	1
21 Ulcer of Stomach or Duodenum	M	6	...	...	...	...	2	3	1	...	...
	F	2	...	...	...	..	1	1	...	...	...
22 Diarrhœa, &c.	M	10	5	...	1	...	...	...	3	...	1
	F	8	6	...	1	...	...	...	...	...	1
23 Appendicitis and Typhlitis	M	5	...	...	...	1	1	1	...	2	...
	F	3	...	...	...	...	...	3	...	...	...
24 Cirrhosis of Liver	M	2	...	...	...	...	...	...	2	...	...
	F	3	...	...	...	...	...	1	...	1	1
25 Acute and Chronic Nephritis	M	47	...	...	...	...	...	7	12	17	11
	F	65	...	...	...	1	...	4	14	19	27
26 Puerperal Sepsis	M	...	...	...	...	...	...	...	...	...	...
	F	3	...	...	...	...	...	3	...	...	...
27 Other accidents and diseases of pregnancy and parturition	M	...	...	...	...	...	...	...	...	...	...
	F	6	...	...	...	...	...	6	...	...	...
28 Congenital Debility and Malformation, Premature Birth	M	50	50	...	...	...	...	...	...	...	...
	F	32	32	...	...	...	...	...	...	...	...
29 Suicide	M	11	...	...	...	...	2	5	4	...	...
	F	5	...	...	...	...	1	1	3	...	...
30 Other deaths from violence	M	39	2	2	1	4	9	7	9	3	2
	F	16	1	...	1	2	1	1	4	4	2
31 Other defined diseases	M	124	16	1	2	5	5	9	40	25	21
	F	124	15	2	3	6	3	9	39	28	28
32 Causes ill-defined or unknown	M	1	...	...	...	...	...	...	...	1	...
	F	3	...	1	...	...	...	...	1	1	...

Number and Causes of Death in each Ward for the Year.

TABLE Ie.

Cause of Death	St. John's Ward	Avenham Ward	Christ Church Ward	Ashton Ward	Maudland Ward	St. Peter's Ward	Moor Brook Ward	Park Ward	Trinity Ward	Deepdale Ward	Ribbleton Ward	Fishwick Ward	Unknown	Totals
Enteric Fever	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Small Pox	...	...	...	...	...	...		...	...	...	...	...	...	...
Measles	4	1	2	3	4	4	1	5	3	7	6	3	...	43
Scarlet Fever	...	...	...	...	...	...	...	...	..	...	...	...	...	...
Whooping Cough	...	1	1	..	...	5	3	...	2	5	...	1	...	18
Diphtheria, Croup	4	1	...	...	...	2	..	...	1	1	..	2	...	11
Influenza	11	8	12	6	9	10	5	13	7	8	6	7	...	102
Encephalitis Lethargica	1	1	1	...	...	...	1	...	...	1	1	...	...	6
Meningococcal Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis of Resp. System	18	7	9	2	6	8	5	12	15	8	4	5	.	99
Other Tuberculous Diseases	1	...	2	4	1	1	1	2	2	3	2	2	...	21
Cancer, Malig. Disease	12	11	15	9	16	18	8	21	21	14	8	10	...	163
Rheumatic Fever		...	1	...	3	...	...	...	...	...	...	...	...	4
Diabetes	...	3	4	..	2	...	1	2	2	1	...	1	...	16
Cerebral Hæmorrhage	5	6	6	4	11	7	6	9	8	6	3	5	...	77
Organic Heart Disease	31	18	20	14	11	28	15	44	26	17	22	10	...	256
Arterio Sclerosis	2	5	5	5	6	6	7	10	10	9	7	4	...	76
Bronchitis	13	11	12	10	7	11	3	13	18	8	14	7	...	127
Pneumonia, all forms	15	8	17	5	11	27	8	27	18	14	16	9	1	176
Other Diseases of Respiratory Organs	1	...	3	1	...	1	2	4	3	...	4	3	...	22
Ulcer of Stomach or Duodenum	..	1	...	1	..	1	...	...	1	1	2	1	...	8
Diarrhœa and Enteritis	2	..	...	1	...	9	1	1	...	1	...	2	...	17
Appendicitis and Typhlitis	...	...	1	...	1	...	...	1	1	1	1	2	...	8
Cirrhosis of Liver	...	...	...	...	...	2	...	..	1	1	...	1	...	5
Acute and Chronic Nephritis	19	5	3	5	8	8	11	13	15	9	5	8	...	109
Puerperal Sepsis	1	...	...	...	...	...	1	...	...	1	...	...	...	3
Other accidents and diseases of pregnancy and parturition	1	2	..	...	...	...	1	...	...	...	1	1	...	6
Congen. Debility and Malformation. Premature Birth	9	6	3	1	8	9	8	8	4	9	10	7	...	82
Suicide	2		3	...	1	1	...	3	4	1	1	...	...	16
Other Deaths from Violence	7	2	3	8	7	5	1	6	5	5	2	3	1	55
Other defined diseases	26	24	24	15	16	20	12	29	19	24	22	21	1	253
Diseases ill-defined or unknown	1	1	1	...	...	...	...	...	...	...	...	2	...	5
Totals	187	122	148	95	128	183	101	223	186	155	137	117	3	1785

TABLE If.

Death Rate, and Analysis of Mortality during the Year 1927.

(Provisional figures. The rates have been calculated on a population estimated to the middle of 1927. The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns. As the registration of stillbirths did not come into operation until 1st July, 1927, no stillbirths are included.)

This Table, with the exception of the line relating to the Borough, has been supplied by the Registrar-General :—

—	Birth-rate per 1000 Total Population	Annual Death Rate per 1,000 Population									Rate per 1,000 Births		Percentage of Total Deaths			
		All Causes	Enteric Fever	Small Pox	Measles	Scarlet Fev. r	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under 2 years)	Total Deaths under One Year	Certified Causes of Death	Inquest Cases	Certified by Coroner after P.M. No Inquest.	Uncertified Causes of Death
England and Wales... ...	16·7	12·3	0·01	0·00	0·09	0·01	0·09	0·07	0·57	0·51	6·3	69	91·7	6·6	0·7*	1·0
107 County Boroughs & Great Towns, including London.	17·1	12·2	0·01	0·00	0·12	0·01	0·10	0·08	0·49	0·46	8·3	71	91·9	6·6	0·9*	0·6
155 Smaller Towns (1921 Adjusted Popul'ns. 20,000-50,000)	16·4	11·3	0·01	0·00	0·7	0·01	0·08	0·05	0·58	0·41	5·0	68	92·7	5·8	0·3*	1·2
London	16·1	11·9	0·01	0·00	0·04	0·01	0·12	0·09	0·39	0·51	7·5	59	90·3	7·9	1·8*	0·0
County Borough of Preston...	**14·88**	**14·04**	**0·008**	**0·000**	**0·353**	**0·000**	**0·148**	**0·090**	**0·838**	**0·433**	**5·81**	**109**	**91·8**	**5·1**	**0·4***	**2·7**

*The Coroners (Amendment) Act, 1926, which came into operation on the 1st May, 1927, provided for the registration of deaths on a certificate of the Coroner after P.M. without inquest. These percentages relate therefore to 8 months of the year only.

TABLE Ig.

Abstract from the Registrar-General's Report.

Population, Births, Deaths, and Infant Mortality for the 52 weeks ended December 31st, 1927.

NAME OF TOWN.	Adjusted Population Mid., 1926	Birth Rate.	Recorded Death Rate.	Measles.	Scarlet Fever.	Wh'ping Cough.	Diphtheria.	Influenza.	Diarrhœa & Enteritis under 2 years	Deaths under 1 year to 1,000 Births.
Stockport	125,400	14.9	12.0	0.03	0.04	0.05	0.04	0.56	8.6	71
Chester	41,710	18.3	10.0	...	...	0.24	0.02	0.46	1.3	56
Birkenhead	158,000	18.5	11.9	0.04	0.01	0.06	0.05	0.45	25.9	92
Wallasey	93,059	13.4	11.1	0.09	0.02	0.13	0.12	0.42	2.4	58
Liverpool	862,600	22.2	13.5	0.04	0.01	0.14	0.10	0.32	17.1	91
Bootle	84,580	22.7	10.9	0.20	0.07	0.04	0.08	0.28	13.6	63
St. Helens	110,000	21.4	11.5	0.55	0.02	0.05	0.05	0.38	6.4	87
Southport	77,970	12.4	13.1	0.01	...	0.03	...	0.80	3.1	49
Wigan	88,620	18.8	13.8	0.63	...	0.18	0.01	0.73	10.2	103
Warrington	76,940	21.1	10.7	0.19	0.01	0.16	0.01	0.52	5.5	72
Bolton	177,000	15.0	13.6	0.12	0.01	0.01	0.56	0.82	8.3	76
Bury	56,840	15.1	13.5	0.07	...	0.02	0.04	0.72	9.3	70
Manchester	752,000	18.3	13.7	0.22	0.03	0.16	0.12	0.62	12.3	82
Salford	247,400	16.7	12.9	0.18	0.02	0.06	0.09	0.53	12.3	75
Asthon-under-Lyne	51,050	17.1	13.0	0.06	0.02	0.16	...	0.33	14.4	72
Oldham	143,000	14.6	13.9	0.05	...	0.04	0.11	0.55	10.5	87
Rochdale	91,510	11.5	16.3	0.01	0.01	0.12	0.11	1.21	6.6	107
Burnley	99,600	15.1	15.0	0.31	...	0.01	0.08	1.12	13.3	110
Blackburn	124,200	14.2	14.7	0.31	0.01	0.02	0.09	0.96	8.5	75
Preston	**124,200**	**14.4**	**14.1**	**0.31**	...	**0.13**	**0.09**	**0.76**	**4.5**	**109**
Blackpool	88,640	12.5	14.4	0.05	0.02	0.03	0.10	0.85	5.4	66
Barrow-in-Furness.	70,420	15.0	11.4	0.17	...	...	0.01	0.36	5.7	55

THE PRESTON ROYAL INFIRMARY.

A general description of the Royal Infirmary has appeared in previous annual reports. The following information is abstracted from the annual report of the Preston and County of Lancaster Queen Victoria Royal Infirmary for the year 1927 :—

The number of in-patients treated during the year was 4,034, as against 3,967 in the previous year. The daily average number of beds occupied was 227, compared with 223 ; the total days maintenance being 82,605, as against 81,246 ; 467 of the patients were transferred to the Lostock Hall Convalescent Hospital, where the average daily occupation of beds was 36 and the average stay of the patient 26 days.

Last year's record in the Out-patient department has been exceeded—17,867 patients were treated (an increase of 979) including 6,620 accident and casualty cases, 2,665 eye, ear, nose and throat, 1,981 surgical, 423 medical, 2,323 X-ray, 1,106 venereal disease, 975 electro-massage, 217 artificial sunlight, and 83 visited at home. The aggregate attendances numbered 100,343, and the prescriptions dispensed 54,119.

Expenditure.—The total expenditure of the Infirmary was £58,225 7s. 0d., of which £27,868 7s. 4d. represented ordinary maintenance, and £30,356 19s. 8d. extensions, improvements and special equipment.

The average costs per patient were as follows :—

	1923			1924			1925			1926			1927		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Annual cost per In-patient at Infirmary	102	19	0	101	18	10	103	10	3	102	14	9⅓	108	17	0
Weekly cost per In-patient at Infirmary	1	19	6	1	19	2½	1	19	9¾	1	19	6	2	1	10¼
Cost of each In-patient at Infirmary	5	7	0	5	2	4	5	0	0	4	18	0	5	3	2½
Cost of each Out-patient at Infirmary	0	5	10	0	5	0	0	4	7	0	4	6½	0	4	9¼
Annual cost of each In-patient at Convalescent Hospital.	70	4	0	71	2	5	73	16	7	86	11	1¾	77	17	10
Weekly do. ...	1	7	0	1	7	4¼	1	8	9½	1	13	8	1	9	11½
Cost of each In-Patient at Convalescent Hospital ...	5	18	0	4	1	8	4	15	10	6	5	1⅓	5	11	2

POOR LAW RELIEF.

Mr. Thomas H. Bentham, Clerk to the Guardians, has kindly supplied the following information.

Number of persons received from the Borough of Preston into the Fulwood Workhouse Hospital :—

	Men	Women	Children	Total
1920	229	213	66	508
1921	205	294	109	608
1922	237	256	89	582
1923	283	279	104	666
1924	329	224	76	629
1925	442	347	84	873
1926	465	334	109	918
1927	327	269	30	626

The total amount of out-door relief paid in respect of the Borough was as follows :—

	£	s.	d.
1920	3055	18	0
1921	12133	16	0
1922	11692	1	7
1923	4384	12	11
1924	7253	17	1
1925	9105	8	7
1926	12137	0	6
1927	11924	10	3

INSURED POPULATION.

Mr. Irvine R. Dearnley, Secretary to the National Insurance Committee, has kindly supplied the following :—

The insured population for the year 1927 again showed a slight increase over the year 1926. The average number of insured persons in the Borough during the year ended 31st December, 1927, was 59,343. Of this number 58,625 were members of Approved Societies.

MEDICAL BENEFIT.

The upward flight in the number of prescriptions issued continued during the year 1927. The total number being 324,636, against 290,518 during 1926, an increase of 34,118. This increase has been persistent since 1922. The average number of prescriptions issued for each insured person on the doctors' lists was six per person.

Preston again leads the way in highest average frequency in the number of prescriptions issued ; being six against an " areal " average of 5.15 for eight similar Lancashire County Boroughs. The frequency in the other eight areas is also an increase of 0.4 per cent. over the year 1926.

The total amount of the drug bill in respect of prescriptions dispensed by chemists in 1927 was £11,710 7s. 2d. The average cost per prescription was 4s. 2d. as against 4s. 0½d. for 1926, and 3s. 9½d. for 1925. Insulin was ordered on 135 occasions.

MEDICAL LIST.

Including assistants, and the resident doctor of the Medical Association, there were 62 doctors on the Insurance Committee's list on the 31st December, 1927. On the same date there were 30 chemists' establishments on the list within the Borough.

TESTING OF MEDICINES.

Numerous tests of medicines were taken during the year and in all the cases the result of an independent analysis was satisfactory.

UNEMPLOYMENT.

Mr. A. Jepson, the Manager of the Employment Exchange, has been good enough to supply the following information regarding the figures relating to unemployment in Preston from April, 1927, to March, 1928 :—

	Men	Women	Boys*	Girls*
1927				
April	2819	1566	101	83
May	2536	1352	35	43
June	2398	923	43	43
July	2003	776	66	41
August	2090	1444	65	67
September	2188	1288	51	75
October	2309	1671	96	79
November	2395	1890	90	67
December	2788	1829	127	111
1928				
January	3065	1997	104	99
February	2832	1557	66	47
March	2523	1128	55	50

*Figures supplied by the Director of Education.

The employment position in Preston during 1927 was much more satisfactory than in the previous year. In the summer of 1927 the number of people either wholly unemployed or temporarily stopped did not come up to the same figures for any of the corresponding periods during the last three years. The improvement reflected in these figures was fairly general, and not confined to one particular industry.

So far as the cotton trade is concerned there has been undoubted developments in the weaving of fancy effects, and employers have departed from the manufacture of ordinary plain goods to others of a higher, better, and intricate qualities. This has given to the town a variety of trade which has served it in good stead during this period of depression, and it is hoped that employers and employed alike have reaped the advantage. There has been some short-time working, however, but it has been mainly confined to those firms using American cotton. The mills, whether spinning or weaving, engaged on Egyptian cotton have been and remain fairly busy, the others are not so.

The electrical, general, and textile sections of the engineering trade have, unfortunately, throughout the year remained in a depressed condition. There has been a marked lack of orders, and both skilled and unskilled men have been obliged to register at the Exchange for employment, or out-of-work pay. The prospects are a little better then they were, but the situation is not at all encouraging.

Employment in the motor trade has remained good throughout the year, and apart from a little furloughing in certain sections full-time work may be said to have been maintained with good wages.

In the building trade after a long period of activity we have experienced a severe slump, and in the early winter of 1927-28 we began to feel the effects of the trade depression. Were it not for the housing scheme that your Council is engaged in there would, it appears, be very little work for the building trade to do. The want for the better class houses seems to have been met, at least temporarily, and very little new building is proceeding.

The rubber trade has been in a good state throughout the year, and apart from occasional stoppages of a sectional character full-time has been maintained.

Trade at the slipper factories has remained fairly good, but even here there have been occasions when furloughing of operatives became a necessity.

In the summer of 1927 employment at the Docks was exceptionally good and the number of boats arriving was well up to the average. On occasions the registered Dock Transport Workers were hardly sufficient to meet the demands of the Port, and the certificated labour engaged had to be followed up with purely casual. Unfortunately, during the latter months of the year a very serious decline set in and business was almost at a standstill so much so that sometimes we had 500 of our registered tally men unemployed. The prospects are a little better.

Besides the larger trades I have just referred to, Preston has the advantage in having a large number of miscellaneous trades which, though they are not very big in themselves, yet in their general aspect afford employment for large numbers of residents of the district. In this connection there may be mentioned the lamp works, the hat and cap factories, the soap works, the hosiery works, the undergarment factories, millinery, dressmaking and tailoring. These apparently have had a better year than generally, although there have been their slack periods the employment in most of these trades has been more dependable and regular.

Laundry services appear to have extended their facilities and should show a good year's work.

The total amount of unemployment benefit paid out in the months covered by this report has been £121,771, which is less than half the amount paid out during the corresponding period of the previous year, and as compared with 1925-26 the amount is approximately £28,000 less.

II.—Sanitary Circumstances of the District.

WATER SUPPLY.

The water supply was described in the report for 1920. The work authorised under the Preston Corporation Act of 1921 is now in hand. The new intakes in the Langden Valley and in the Hareden Valley are completed.

The construction of the new reservoir at Longridge is progressing satisfactorily.

The following report was made by the Borough Analyst upon a sample of the town's water submitted on March 20th, 1928 :—

	Parts per 100,000.
Total solid matter in solution	6.40
Oxygen required to oxidize in 15″	0.048
Oxygen required to oxidize in 3 hours	0.088
Ammonia	0.001
Ammonia from Organic Matter by distillation with alkaline permanganate	0.006
Nitrogen as Nitrates	None
Nitrogen as Nitrites	None
Combined Chlorine	1.05
Total Hardness	3.30

The sample was clear, faintly yellow and odourless. It contained a trace of suspended matter which consisted mainly of vegetable debris with diatoms, infusoria and a few insect remains.

The sample is a good soft upland surface water, well fitted for drinking and all domestic purposes.

Reaction to litmus—alkaline.

(Signed) W. H. ROBERTS, M.Sc., F.I.C.,
Borough Analyst.

CLOSET ACCOMMODATION.

There are approximately 29,435 fresh water closets, 477 waste water closets, 13 trough closets (exclusive of those in use at schools) and 27 privy middens, all of which latter are situated on farms and cottages in the rural parts of Ashton, Deepdale, Ribbleton and Fishwick Wards, and are not within reach of a sewer.

The sanitary conveniences in use at factories and workshops and schools are not included in the above.

SCAVENGING.

The system in force was described in the report for 1920. The work has been carried out satisfactorily. The crude refuse is tipped into a bunker and carried by means of a chain bucket to a mechanically operated revolving screen. The apertures in the first part of this screen are $\frac{7}{8}''$ diameter, and result in the removal of dust. This dust falls into a hopper, and is conveyed by means of a chain bucket to a loading hopper. The second part of the screen has $1\frac{1}{2}''$ diameter apertures, through which fall the cinders and unburnt pieces of coal. These are similarly conveyed to the second loading hopper. The remainder of the debris is carried by an endless belt to a bunker feeding the particular group of furnaces in use, on the way to which it is hand sorted, the tins, rags, and paper so removed being subjected to baling processes and made marketable.

The machinery for dealing with condemned meat, slaughterhouse refuse and fish offal consists of a bone crusher, three steam jacketed digesters, a hydro fat extractor and a pulveriser. All fumes from the cookers are led to the chimney flue. This installation has proved of great value, in that it converts waste products which were difficult to destroy into a dry powder of high food value for animals.

WORK OF THE DISTRICT SANITARY INSPECTORS.

DWELLING HOUSES.

The number of inspections and re-inspections are tabulated for each district :—

TABLE IIA. **Inspections.**

	SANITARY DISTRICTS					
	No. 1	No. 2	No. 3	No. 4	No. 5	TOTAL
Inspected on Complaint	730	676	791	1046	835	4078
Re Infectious Diseases	104	63	31	41	47	296
Housing and Town Planning Acts	55	49	...	25	...	129
Rent Restriction Act	...	...	...	...	...	...
TOTALS	889	788	822	1112	882	4493

Re-Inspections.

	Sanitary Districts					
	No. 1	No. 2	No. 3	No. 4	No. 5	Total
Inspected on Complaint	1573	1314	1258	950	1609	6704
Re Infectious Diseases	46	24	15	9	31	125
Housing and Town Planning Acts	15	101	80	86	...	232
Rent Restriction Act	...	...	...	...	...	...
Totals	1634	1439	1353	995	1640	7061

These inspections and re-inspections involved the sending of 1,507 letters with regard to the common defects, i.e., yard flagging, cleansing and limewashing, and provision of dustbins. 120 Informal notices were served in connection with the surveys under the Housing Regulations, 1910, and the Housing Act, 1925. There were also 45 Statutory notices under the Public Health Acts served by the authority of the Council. Legal action to enforce the requirements of the Council was taken in the following instances :—

Public Health Act, 1875.

Two houses. Section 94 (Nuisances). Case withdrawn on completion of work.

Preston Corporation Act, 1914.

Three houses. Section 110. Cases withdrawn on provision of pails and payment of costs.

The results of the work are shewn in Table IIb. 3,368 houses in all have been dealt with. The improvements, repairs and alterations are multifarious and cover practically every possible kind of defect. The work done in connection with the Public Health Acts generally relating to one and only occasionally to more than one defect. That in connection with the Housing and Town Planning Act, relating as it did to the poorer class of property, dealt with a variety of defects in each individual house which were discovered during a thorough sanitary survey.

TABLE IIb.

Summary of Sanitary Improvements effected.

	Public Health Acts.						Housing and Town Planning Acts.					
	Sanitary Districts						Sanitary Districts					
	No. 1	No. 2	No. 3	No. 4	No. 5	Total	No. 1	No. 2	No. 3	No. 4	No. 5	Total
Houses dealt with :—	**641**	**428**	**933**	**468**	**787**	**3257**	**12**	**25**	**60**	**14**	...	**111**
1 Lighting and Ventilation improved ...	32	2	30	14	5	83	..	26	17	4	...	47
2 Roofs reconstructed or repaired	80	53	235	41	81	490	3	12	9	..	...	24
3 Floors repaired or relaid	16	19	51	9	7	102	1	8	7	1	...	17
4 Fireplaces repaired or provided	1	5	25	6	12	49	...	17	4	..	...	21
5 Staircases repaired	..	1	22	..	8	31	..	6	11	..	...	17
6 Walls and chimneys pointed and repaired	43	2	151	27	34	257	..	4	22	3	..	29
7 Repairs and renewals to W.C. accommodation	133	33	90	42	192	490	..	4	2	9	...	15
8 Portable ashpails provided	70	31	192	93	270	656	..	8	7	2	...	17
9 New Sinks or other sanitary fittings...	5	9	37	13	13	77	..	3	12	1	...	16
10 Yard and lobby pavements repaired...	13	..	31	13	15	72	3	..	4	3	—	10
11 Drains tested, repaired or renewed ...	264	242	279	130	318	1233	..	2	3	..	...	5
12 Gutters and downspouts repaired or renewed	93	10	91	29	31	254	1	2	12	1	...	16
13 Provided with sufficient water supply..	7	2	54	2	2	67	..	..	2	..	...	3
14 Plasterwork and limewashing	35	14	119	61	42	271	2	9	31	3	—	45
15 General nuisances	51	11	42	43	18	165	3	10	..	1	...	14

Summary of Work done during the Year 1927.

DRAINS.

A large volume of work was done in connection with sanitary defects arising out of drains. The work done is included in the foregoing table. The inspections were as follows :—

Inspections.

	SANITARY DISTRICTS					
	No. 1	No. 2	No. 3	No. 4	No. 5	TOTAL
Street Gullies	8	1	...	4	7	20
Drains	674	745	830	115	652	3016

Re-Inspections.

	SANITARY DISTRICTS					
	No. 1	No. 2	No. 3	No. 4	No. 5	TOTAL
Street Gullies	4	3	...	...	...	7
Drains	1091	2274	1214	175	1160	5914

SCHOOLS.

56 Visits were made by the Sanitary Inspectors. In ten instances the drains and water closets were repaired, whilst in two, the floors and walls were repaired. Six rats were caught.

FACTORIES AND WORKSHOPS.

The following tables deal with the premises registered, the number of inspections and the results of such inspections. Of the 63 defects originally found, 63 were remedied. There is very little out-working done in the Borough, the premises upon which it is carried out have been inspected frequently, and found satisfactory.

TABLE IIc.

List of Factories and Workshops on Register during the Year 1927.

		District					
		No. 1	No. 2	No. 3	No. 4	No. 5	Total
Artificial Teeth Makers		7	5	8	7	8	35
Bakers and Confectioners (Retail)		59	45	34	25	35	198
Bakers (Public)		...	2	...	1	...	3
Basket Makers		1	2	2	...	2	7
Beer Bottlers		...	3	2	1	5	11
Biscuit Makers		...	1	2	...	...	3
Boot, Shoe, and Clog Makers, Leather Curriers		32	23	30	26	22	133
Brass Founders		...	1	1	1	3	6
Breweries		...	2	1	...	2	5
Brush Makers		1	...	...	...	2	3
Cabinet Makers, Wood Carvers, Upholsterers...		4	11	6	6	10	37
Coach Builders		3	2	...	5	1	11
Cotton Waste Cleaners and Dealers		...	3	...	2	...	5
Cotton Manufacturers		15	8	13	7	4	47
Coopers		1	1	2	1	...	5
Cycle Makers and Enamellers		1	6	6	4	6	23
Engravers		...	1	...	1	6	8
French Polishers		1	3	...	2	3	9
Ironfounders, Motor Engineers & Boiler Makers		9	12	6	12	9	48
Joiners, Builders, Wheelwrights, Wood Turners		18	18	7	6	11	60
Laundries		3	...	1	...	...	4
Marine Store Dealers		1	5	2	3	2	13
Milliners, Dressmakers, Underclothing Manufacturers		63	53	43	38	38	235
Picture Framers, Mount Cutters, Gilders		2	3	2	1	3	11
Photographers		...	2	1	7	3	13
Plumbers, Painters		27	10	14	11	14	76
Printers, Bookbinders		...	4	...	8	16	28
Restaurant Keepers		4	25	31	4	4	68
Rope and Twine Makers		1	1	...	...	...	2
Saddlers		1	4	1	2	1	9
Smiths, Black and White, and Tinplate		5	12	5	6	10	38
Stone and Marble Masons		11	1	2	1	1	16
Sugar Boilers		1	1	...	1	2	5
Tailors		11	22	8	18	36	95
Watch Makers and Jewellers		1	9	3	6	7	26
Wire Workers		2	2	2	...	1	7
Offensive Trades	Fell Mongers	...	...	...	...	...	...
	Soap Boilers	...	...	...	1	2	3
	Fat and Tallow Melters	1	1	...	1	2	5
	Knacker Yards	1	...	...	...	...	1
	Gut Scrapers	...	1	...	...	...	1
	Tripe Boilers	1	2	2	...	...	5
Various		13	13	16	23	22	87
Total		301	320	253	238	293	1405

TABLE IID.

Factories, Workshops, Workplaces and Home-Work.

1.—INSPECTION.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Visits to Warehouses	238	...	...
Factories (including Factory Laundries)	77	...	...
Workshops (including Workshop Laundries)	1019	16	...
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	678	...	...
Total	2012	16	...

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Act :—				
Want of Cleanliness	15	15	...	
Want of Ventilation	...	...	...	
Overcrowding	...	...	...	
Want of drainage of floors	20	20	...	
Other Nuisances	21	21	...	
Sanitary accommodation — insufficient	2	2	...	
Sanitary accommodation — unsuitable or defective	5	5	...	
Sanitary accommodation — not separate for sexes	...	...	...	
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse (s. 101)	...	...	...	
Breach of special Sanitary requirements for bakehouses (ss. 97 to 100)	...	...	...	
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report)	...	...	...	
Total	63	63	...	...

OFFENSIVE TRADES.

The following offensive trades are established in the Borough :—

Soap Boiler—3 ; Fat and Tallow Melter—5 ; Knackers Yard—1 ;
Gut Scraper—1 ; Tripe Boiler—5 ; Fish Friers—169.

All these premises are subject to frequent inspection. 496 Visits were paid during the year and 14 nuisances were remedied. The conditions are as satisfactory as the nature of the trade will allow.

PIG KEEPING.

There are 16 Pig Keepers in the Borough, of whom nine are Farmers. The total number of pigs kept is 217.

The sanitary conditions, especially those relating to the distance from inhabited dwellings, drainage, conditions of floors, and buildings, and means of temporary storage of manure are satisfactory. 131 Visits were made to the premises.

COMMON LODGING HOUSES.

There are 36 Common Lodging Houses on the register. The accommodation consists of 885 beds in 246 rooms. The average number of lodgers per night is 610. The premises are visited regularly (2,693 visits have been paid) by the Sanitary Inspectors. Many of these houses are ancient and are difficult to maintain in a sanitary condition. The accommodation for women has been the subject of a recent report to the Health Committee, the main defects reported on being lack of accommodation for personal ablutions, for storage of personal effects, adequate screening of the rooms occupied by women and means of escape from fire.

The bye-laws made by the local authority under Section 80 of the Public Health Act, 1875, for :—

1. Fixing number of lodgers and separation of sexes ;
2. Promoting cleanliness and ventilation in such houses ;
3. Giving of notice and taking precautions in case of infectious disease, and
4. The general well ordering of such houses ;

have been carried out.

HOUSES LET IN LODGINGS.

The following report was submitted to the Health Committee in February, 1928, as a consequence of which the model bye-laws were adopted and submitted to the Ministry of Health for approval :—

" A house let in lodgings is defined as ' a house or part of a house intended or used for occupation by the working classes and let in lodgings or occupied by members of more than one family.'

Houses let in lodgings do not include ' any lodging house in which the occupier resides and not more than one family is lodged.'

TABLE IIe. HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.									OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.		
	Lists received from Employers.						Notices served on Occupiers as to keeping or sending Lists.	Prosecutions.		Instances.	Notices served.	Prosecutions.	Instances.	Orders made (S. 110).	Prosecutions (Sections 109, 110).
	Twice in the Year.			Once in the Year.				Failing to keep or permit Inspection of Lists.	Failing to send Lists.						
	Lists	Outworkers. Contractors.	Outworkers. Workmen.	Lists.	Outworkers. Contractors.	Outworkers. Workmen.									
Wearing Apparel:—															
(1) making, &c.	13	4	17	1	...	...	...	...	...	...	...	...	...	...	...
(2) cleaning and washing	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	26	8	34	1	...	...	...	...	...	...	...	...	...	...	...

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Factories	194
Workshops	940
Workplaces	69
Retail Bakehouses	199
Public do.	3
Total number of Workshops on Register	1405

5.—OTHER MATTERS.

Class.		Number.
Matters notified to H.M. Inspector of Factories :—		
Failure to affix Abstract of the Factory and Workshop Act (s. 133) 1901 ...		1
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5). 1901	Notified by H.M. Inspector	10
	Reports (of action taken) sent to H.M. Inspector...	16
Other		...
Underground Bakehouses (s. 101) :—		
Certificates granted during the year		...
In use at the end of the year		...

TABLE IIf.

Summary of Work done under the Factory and Workshop Act during the Year 1927.

	No. 1 District.	No. 2 District.	No. 3 District.	No. 4 District.	No. 5 District	Total.
Number of Factories and Workshops on Register	301	320	253	238	293	1405
,, Circular Letters sent re Out-workers	...	27	...	...	...	27
,, Out-workers reported	...	34	...	...	1	35
Visits to Factories and Workshops	270	392	127	51	179	1019
,, Retail Bakehouses	8	73	9	7	3	100
,, Public Bakehouses	...	17	...	1	...	18
,, Home-workers premises	1	27	...	...	1	29
Drains tested	...	3	4	...	11	18
DEFECTS FOUND AND REMEDIED :—						
Defective Drains	...	3	3	...	12	18
,, Slopstone Pipes	...	...	...	...	1	1
,, Spouts and Roofs	...	1	...	...	1	2
,, Water Closets	1	3	1	...	...	5
,, Yard Pavement	...	...	2	...	...	2
Limewashing required	3	1	4	6	1	15
General Nuisances	1	...	8	2	6	17
Insufficient W.C. accommodation for Females	...	...	1	...	1	2
Insufficient W.C. accommodation for Males	...	...	...	...	...	...
No receptacle for refuse	...	...	...	...	1	1
Manure Accumulations	...	...	...	...	...	...
Overcrowded	...	...	...	...	...	...

Total defects found, 63; remedied, 63.

There are 35 houses let in lodgings. They include 156 tenancies and house 430 persons.

A summary of the number of houses coming under the definition, the number of separate lets, the number of single room lettings, of two and three room lettings, their rentals and the number of persons accommodated is appended.

The rentals are as follows :—

A.—One Room Tenancies (134).

Rent ...	2/6	4/6	5/-	5/6	5/8	6/-	6/6	7/-	7/6	8/-	8/2	8/6
No. of Lets.	1	1	18	2	1	11	4	28	1	26	1	2

Rent	9/-	9/6	10/-	10/6	11/-	13/-	14/-	16/-	No charge
No. of Lets ...	2	1	17	11	2	1	2	1	1

(b) Two Room Tenancies. (21).

Rent ...	5/-	5/6	6/8	8/-	10/-	11/-	12/-	12/6	13/4	16/-
No. of Lets	2	1	2	3	4	1	2	2	3	1

(c) Three Room Tenancies (1).

Rent	12/-
No. of Lets ...	1

OWNERSHIP.

There are 18 owners of 35 houses.

One owner owns 8 houses	8
One owner owns 4 houses	4
Two owners own 3 houses each	6
Three owners own 2 houses each	6
Eleven owners own 1 house each	11

In six houses only is there any occupier as defined in the bye-laws. Nine of the houses in Library Street, five in Stoneygate, one in Pleasant Street and three in Manchester Road, were originally registered as common lodging houses and are, as such, subject to the bye-laws in force.

Houses Let in Lodgings.

Situation	No. of premises	No. of lettings	No. 1 room per let	Persons		No. 2 rooms per let	Persons		No. 3 rooms per let	Persons	
				Over 10 years of age	Under 10 years of age		Over 10 years of age	Under 10 years of age		Over 10 years of age	Under 10 years of age
Lancaster Road	1	5	1	2	...	4	10	4	...	...	...
Moor Lane & North Road	1	3	2	2	...	1	3	1	...	...	...
Bedford Street	1	4	1	3	2	2	6	2	1	4	...
Fylde Road	1	7	6	14	13	1	2	1	...	...	...
Library Street	10	38	34	64	22	4	10	3	...	...	...
Stoneygate...	8	37	31	70	29	6	17	5	...	...	...
St. John's Place	3	14	14	25	10	...	...	...	...	...	...
Rose Street	2	7	7	13	...	...	...	...	...	...	...
Shepherd Street	2	8	7	14	...	1	2	...	...	...	...
William Street	1	3	2	3	1	1	5	...	...	...	...
Manchester Road ...	4	22	21	35	6	1	2	1	...	...	...
Pleasant Street	1	8	8	16	8	...	...	...	...	...	...
TOTALS	35	156	134	261	91	21	57	17	1	4	...

Population—	Over 10 years of age ...	322
	Under 10 years of age ...	108
	Total	430

OVERCROWDING.

According to the standard laid down, i.e., 360 cubic feet for persons over 10 years of age and 250 cubic feet for persons under 10, we have 29 instances of overcrowding (18.6 per cent. of the total lets) housing 108 persons (25.1 per cent. of the total persons living in these houses). The severity of the overcrowding varies from a trivial shortage such as a deficiency of 11, 18 and 31 cubic feet to graver instances of 502, 504 and 622 cubic feet.

In all but one instance the overcrowding was found in single room lets. The application of the bye-laws would undoubtedly be a great hardship to the families concerned and I would suggest that this Article be amended in such a manner as to control lettings subsequent to their being put into operation. As the population of these lodgings is of a very fluid nature it would not be long before a substantial degree of control became effective.

Overcrowding.

Situation	Total Lets	Instances of Overcrowding	Deficiency in cubic feet	Total Persons affected	
				Over 10	Under 10
Lancaster Road ...	5	...	...	...	...
Moor Lane and North Road ...	3	...	...	...	...
Bedford Street ...	4	...	...	...	...
Fylde Road ...	7	2	18, 84	4	6
Library Street ...	38	10	622, 502, 504, 94, 11, 168, 53, 31, 175, 219	21	14
Stoneygate ...	37	10	162, 367, 52, 404, 151, 121, 30, 268, 18, 60	23	17
St. John' Place ...	14	3	334, 288, 250	6	7
Rose Street ...	7	...	...	...	...
Shepherd Street ...	8	2	42, 200	4	1
William Street ...	3	1	290	1	...
Manchester Road ...	22	1	74	2	1
Pleasant Street ...	8	...	...	...	...
TOTALS ...	156	29	...	62	46

According to the Model Bye-laws every habitable room must have a window or windows opening directly to the external air and having, where practicable, a total area exclusive of sash frames equal to at least one-tenth of the floor area of the room and capable of being opened at the top, and to at least one-third of the extent of the window.

In the houses under review the proportionate window area is less than the prescribed amount in 88 instances or 47 per cent. of the whole.

Between	one-tenth and one-eleventh	12	instances
,,	one-eleventh and one-twelfth	17	,,
,,	one-twelfth and one-thirteenth	15	,,
,,	one-thirteenth and one-fourteenth	11	,,
,,	one-fourteenth and one-fifteenth	9	,,
,,	one-fifteenth and one-sixteenth	7	,,
,,	one-sixteenth and one-seventeenth	2	,,
,,	one-seventeenth and one-eighteenth	2	,,
,,	one-eighteenth and one-nineteenth	1	,,
,,	one-nineteenth and one-twentieth	2	,,
,,	one-twentieth and one-twentyfirst	2	,,
Less than one-twentyfirst		6	,,

In over one-half the deficiency is small in amount.

The houses under review are ordinary dwellinghouses with separate paved yards each possessing water supply, outside W.C., ashbin, sinks, and wash boiler.

There is no food storage accommodation for the different families and cooking facilities for those in the upper rooms consist of an open fireplace. In some instances a gas cooker has been installed.

Most lodgers do their personal and clothes wash in their own rooms. Cooking is done over the open fire in each of the upper rooms or in the oven in the case of persons who rent a room with a cooking range. There can be no food storage accommodation other than in cupboards in the rooms. From personal observation I can state that the question of the provision of cooking facilities and food storage arises only to a limited degree. The frying pan is practically the only implement used and great reliance is placed upon ready-cooked hot or tinned foods.

The adoption of the bye-laws would serve the following purposes. The Health Department would be able to establish a register and all intended conversion of dwellings or premises would be submitted to a careful inspection. We should be able to obtain particulars as to the nature of the let, the measurement of the rooms, the names of the lodgers and details of the sanitary accommodation from the "occupier." Power of entry would be legalised. Full control of the drainage, ventilation, lighting and cleanliness of the rooms, and common passages, staircases, sinks, W.C.'s and receptacles for refuse would be ensured. Similarly, rules regarding the cleanliness of the rooms and the belongings of tenants and the keeping of animals would be enforced and most important the question of the provision of means of escape from fire in the larger buildings would be ensured.

The urgency of this problem scarcely arises in the ordinary four-roomed two storey dwelling used for houses let in lodgings but it applies with special force in the case of large houses converted. We have one instance where such a conversion has taken place ; the rooms are separated by wooden partitions and on the second floor the house is separated from a motor works and blacksmiths shop by a wooden partition. The house is three storeys in height and contains 31 persons. It has already been threatened by fire from the adjoining premises.

In view of the multifarious calls upon Inspector Crossthwaite's time in connection with his district, and in connection with his duties as the sampling officer under the Food and Drugs Acts and the Fertilizers and Feeding Stuffs Act, 1926, I consider that the question of the supervision of these houses and of common lodging houses is a matter requiring the careful attention of the Committee."

THE RAG FLOCK ACT.

No samples have been taken. No rag flocks are sold in the Borough.

RATS AND MICE DESTRUCTION ACT.

The advice of the Department was sought by proprietors of infested premises on numerous occasions. Buildings were inspected as follows :—

Factories	3
Food Preparing Premises...	24
Groups of Dwellinghouses	115

In 103 instances the cause of the invasion was found to be defective drains. In each case the possibility of further infestation was removed by the execution of the necessary repairs. In these operations over 348 rats were destroyed.

During the year special attention was paid to the rat infestation at the Knackers Yard.

The necessary inspections and supervision of the work entailed called for 467 visits of the staff.

STABLE PREMISES AND GARAGES.

Have been the subject of 206 visits. As a result, three stables have been abolished, 31 have been cleansed, 24 new drains installed, covers to middens in eight instances, 16 old middens abolished, pails have been substituted, and arrangements made with the Cleansing Department to remove periodically, 49 offensive accumulations abolished, and three structural repairs carried out.

THEATRES AND CINEMAS.

In 16 Theatres and Cinemas, of which two are used for theatrical performances, and the remainder as cinemas, the seating is as follows :—

Cinemas, 14.	Total Seats, 12,962.
Theatres, 2.	Total Seats, 4,452.

In accordance with the regulations issued by the Ministry, Circular 120, 25/8/20, each place of entertainment has been visited and a certificate issued to the proprietor for presentation to the Licensing Authority, who require such certificate before they can grant the licence. This certificate must state that the premises are satisfactory in sanitary and other respects. Special attention has been paid to ventilation, cleanliness, condition of the dressing rooms and, in the case of picture houses, the proximity of the front seats to the screen. The standard laid down in the Interim Report of the Joint Committee on Eyestrain in Cinemas appointed by the Illuminating Engineering Society in October, 1919, which has been adopted, was given in the report for 1921.

In two cases cinemas were unsatisfactory as regards drainage, and have been improved. In one case, 14 rats were caught.

During the year the District Inspectors paid 78 official visits to places of entertainment.

SHOPS ACTS 1912 AND 1913.

The administration of these Acts was transferred to the Police on January 1st, 1924.

VANS.

The vans used as permanent residences in the Borough are under constant supervision. Owing to the difficulty in obtaining housing accommodation it has been sufficiently satisfactory if the van dwellers were provided with water, means of disposal of refuse and could secure the use of closet accommodation. During the Whit-Week Fair 44 vans visited the town and were stationed in and about the Market Place. They housed approximately 120 persons. Special arrangements made on their behalf included the daily cleansing of the ground in the early morning by the Cleansing Department and the disinfection of the area. Water supply was specially provided by the Water Department and use made of the public sanitary conveniences in Earl Street, Birley Street and Church Street. During the week the Sanitary Inspectors visited the vans daily and made enquiries as to the health of the inmates. Three hundred and fifty-two such visits were made.

While these vans are occupied by respectable and responsible persons it is necessary to say that their presence in the centre of the town raises special sanitary problems which would become acute in the event of an outbreak of dangerous infectious disease.

The following report on Tents and Vans was submitted to the Committee in December, 1927 :—

General Remarks.

There are 50 vans permanently established in the Borough housing 124 persons. They are established as a rule singly or in pairs standing in a yard or other vacant plot of ground but in some cases they are aggregated in colonies, e.g.,

Grimsargh Street	10 vans
Skeffington Road	7 ,,
Strawberry Gardens, Hudson's Brow	6 ,,
Dog and Partridge Yard	5 ,,
Stable Yard, Ribbleton Lane ...	4 ,,
Delaware Street Yard	3 ,,

These vans are single room structures on wheels standing about 3′ 6″ above the ground. They contain a cooking stove, bunks and a little furniture. The vans vary in size, from the largest 20′×7′×7′ giving 980 cubic feet to the smallest 7′ 3″×5′×5′ 8″ or 205 cubic feet.

The number of inhabitants per van varies from one to five and the average number is nearly two and a half per van so that the average air space per person must be very small, and compares very unfavourably with the 300 cubic feet allowed by our bye-laws for Common Lodging Houses.

The Ownership of the Vans.

Eighteen vans are in one ownership, five in another, 16 are owned by the occupiers and the remainder are let by the owners of single vans.

Rental.

In several instances the owner-occupier owns the site upon which the vans stand.

Other owner-occupiers pay a ground rent, two pay 1s. 0d. per week each van, two pay 3s. 0d. per week, one pays 3s. 6d. per week and four pay 5s. 0d. per week each van.

Non-owner occupiers pay a variable rent generally including the ground rent (this is, in some instances payable direct to the owner of the land).

The combined rentals are as follows : 7s. 6d. in six instances ; 8s. 0d. in one instance ; 8s. 6d. in two instances ; 9s. 0d. in six instances ; 9s. 6d. in two instances ; 10s. 0d. in 11 instances and 12s. 0d. in one instance.

Water Supply.

All vans obtain town's water. In three instances there is a stand pipe on the site serving 17 vans.

In seven encampments, consisting of 19 vans, reliance is placed upon adjacent houses. In one of these cases the occupants of seven vans are 300 yards waay from the nearest supply. In the remaining instances (14 vans) the van-dwellers obtain their water from adjacent stables, garages, knackers yard, farms and coal yards.

CLOSET ACCOMMODATION.

The Skeffington Road camp (7 vans, 23 persons) has one pedestal W.C. without flushing arrangement and four pail closets.

The Grimsargh Street camp (10 vans, 12 persons) have one pail closet.

The Dog and Partridge Inn camp (5 vans, 15 persons) have a urinal and W.C. in the yard.

The Strawberry Gardens camp (6 vans, 23 persons) have a urinal and W.C. situated in the ex-licensed premises known as the Strawberry Gardens Beerhouse.

The remainder use the closets of adjacent houses.

DISPOSAL OF REFUSE.

In the case of pail closets the contents are usually dug into adjacent gardens or into the ground. The same arrangement holds good in the case of ashes and garbage. The ground surface about the vans is polluted with solid and liquid putrescible matter.

The main indictment against the van is the inadequate accommodation offered for human beings. The overcrowding, the lack of privacy, the lack of house keeping and home making implements, the discomfort of constant actual close contact with persons and things render these places but a travesty of what a human being requires for a permanent home. There are 44 children under 10 years of age to be made into citizens under these conditions.

Add to this the flimsy nature of the buildings and the elementary sanitary arrangements and it must be allowed that these vans are unsuited for permanent habitation. True relief can only be obtained by the provision of houses so that the demand for vans, considering the high rental, and the poor accommodation they afford, will become negligible.

The Town Clerk informs me that the Housing of the Working Classes Act, 1885, provides that a van, in such a state as to be a nuisance or injurious to health, or so overcrowded as to be injurious to health shall be deemed to be a nuisance within the meaning of Section 91 of the Public Health Act, 1875. The Corporation can under the latter Act make bye-laws for promoting cleanliness in, and the habitable condition of vans and for preventing the spread of infectious disease by the persons inhabiting them and generally for the prevention of nuisances in connection with the same.

Section 43(1) of the Public Health Act, 1925, extends Section 9(1) of the Act of 1885 to any tent, van, shed or similar structure which is *used* for human habitation *in such a way* as to be a nuisance or injurious to health or to cause a nuisance or give rise to conditions injurious to health. Sub-section (2) and (3) of this Section enable a Court of Summary Jurisdiction on proceedings for the abatement of a nuisance caused by or in connection with a tent, van, shed or similar structure used for human habitation or for contravention of bye-laws under Section 9 of the 1885 Act to prohibit the use of the structure for human habitation at such places or within such area as may be specified in their order, These powers are very wide and are sufficient for the purpose. The Model Bye-laws of the Ministry of Health amplify and detail the main points upon which the local authority may act but do not introduce any new features of control. The main purpose of this report is to show that notwithstanding the great efforts made in recent years by the Housing Committee there is still a very great need."

MISCELLANEOUS.

In addition to the work under the foregoing heads, a large volume of inspection under miscellaneous heads was carried out. These were :—

Tents and Vans	671 visits
Offensive Accumulations	65 visits
Animals so kept as to cause a nuisance	66 visits

SMOKE OBSERVATIONS.

There are approximately 141 chimneys in the Borough, and observations have been made upon 91 of them, giving 449 half-hour observations during the year. No observations were made on 50 chimneys.

The attached chart "A" shews the rise and fall of the monthly averages of black and moderate smoke, the number of observations on which the averages are based being given at the foot of the monthly columns. For comparison, the chart also deals with the years 1925 and 1926.

In general, the results of the observations are extremely unsatisfactory. The effects of the pollution of the atmosphere with sooty particles and grit are deleterious to both persons and things. Not the least serious effect of atmospheric pollution is the cutting off of the natural sunlight which is so necessary for the growth of children.

The Public Health (Smoke Abatement) Act, 1926, which came into force on July 1st, 1927, should improve matters in that the sending forth of smoke in such quantities as to be a nuisance, may be dealt with as a nuisance notwithstanding that the smoke is not black smoke. Also the expression " smoke " is to include soot, ash and grit. Penalties are increased and local authorities are given power to make bye-laws for the further control of smoke abatement. The adoption of these bye-laws is still under consideration. A very helpful provision is the power to include in building bye-laws a bye-law requiring the provision in new buildings, other than dwellinghouses, of such arrangements for heating and cooking as are calculated to prevent or reduce the emission of smoke.

Six cotton mills have been converted from steam to electric drive in recent times. They represent nearly 4,000 looms and a quarter of a million spindles. The figures as to the number of looms and spindles are obtained from the 1927 Cotton Spinners' and Manufacturers' Directory.

Percentage of electric-driven mills :—

	Total	Electric-driven	Percentage of whole
Mills	48	6	12.5%
Looms	52,825	3,996	7.56%
Spindles	1,492,078	243,752	16.34%

Among our chimneys, observations of more than five minutes black smoke were noted in 44 instances. These were duly reported to the Committee and statutory notices served in three instances. There have been no prosecutions.

DISINFECTION.

The Disinfectors are responsible for the disinfection of premises after infectious disease and after death from tuberculosis or change of address of persons suffering from tuberculosis. The work is summarized below :—

TABLE IIG.

	District **No. 1**	District **No. 2**	District **No. 3**	District **No. 4**	District **No. 5**	**Total**
Beds	219	166	141	161	99	786
Mattressses	86	65	67	81	70	369
Bolsters	311	214	186	191	130	1032
Pillows	618	432	380	289	216	1935
Other items of Bedding, etc.	283	226	111	142	93	855
Houses	302	211	198	209	178	1098
Rooms	605	413	342	339	309	2008
Schools	1	1	0	1	1	4
Institutions	2	3	0	4	6	15
Jumble Sales	7	23	8	19	13	70
Vehicles	...	...	...	...	2	2
Books	76	43	81	71	19	290

REPORT ON THE ADMINISTRATION OF THE CANAL BOATS ACTS, 1877 AND 1884.

The records show 58 boats to have been registered, 29 of which have been cancelled, leaving 29 on the register. Four infringements of the regulations were found and these were promptly dealt with on informing the owners.

On inspection the boats were found in a fairly satisfactory condition. The crews of the boats were very willing to do all in their power to keep them in a cleanly state.

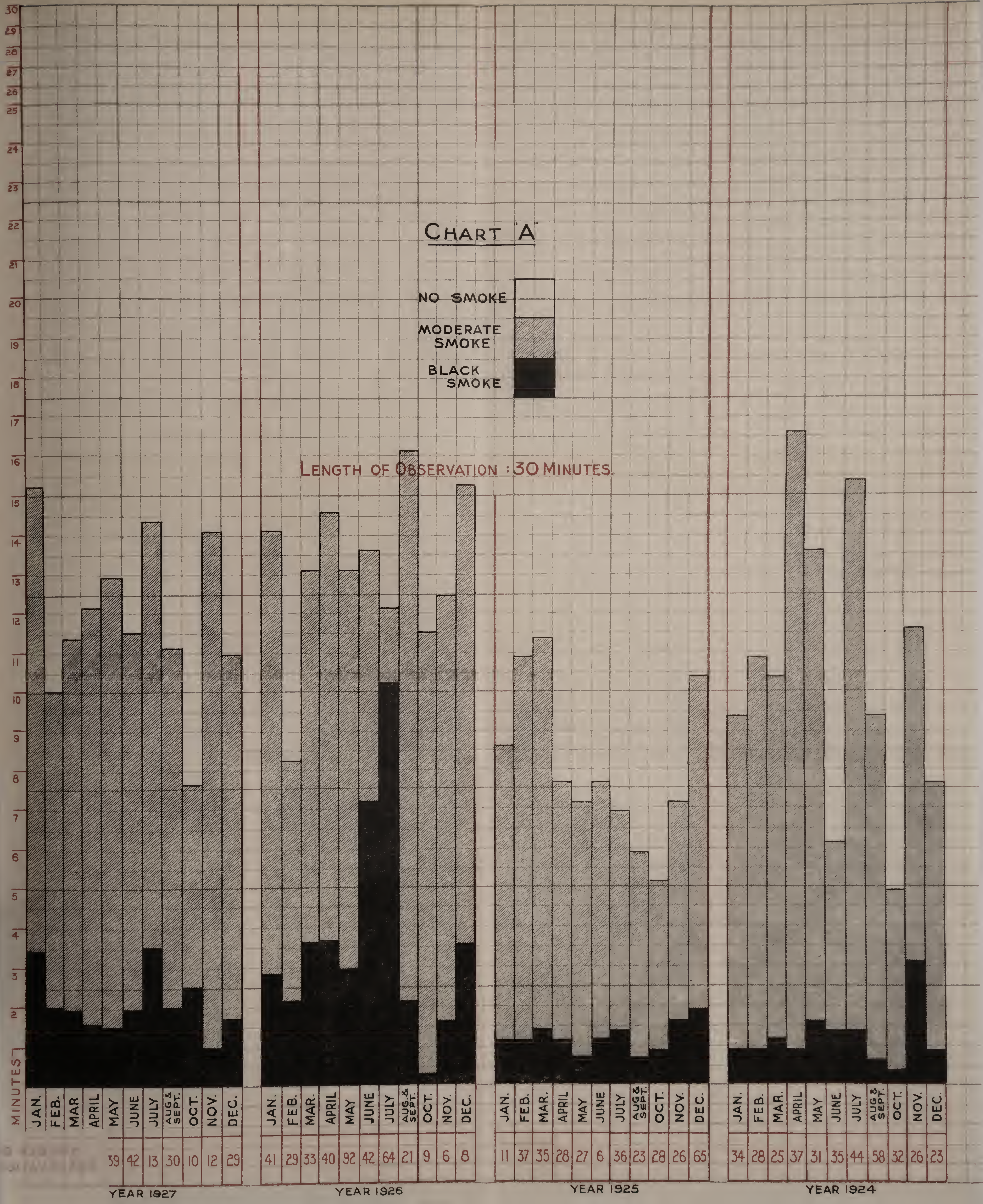
CHART "A"
NO SMOKE
MODERATE SMOKE
BLACK SMOKE
LENGTH OF OBSERVATION : 30 MINUTES.
MINUTES
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
JAN.
FEB.
MAR
APRIL
MAY
JUNE
JULY
AUG & SEPT.
OCT.
NOV.
DEC.
39
42
13
30
10
12
29
YEAR 1927
JAN.
FEB.
MAR.
APRIL
MAY
JUNE
JULY
AUG.& SEPT.
OCT.
NOV.
DEC.
41
29
33
40
92
42
64
21
9
6
8
YEAR 1926
JAN.
FEB.
MAR.
APRIL
MAY
JUNE
JULY
AUG & SEPT.
OCT.
NOV.
DEC.
11
37
35
28
27
6
36
23
28
26
65
YEAR 1925
JAN.
FEB.
MAR.
APRIL
MAY
JUNE
JULY
AUG & SEPT.
OCT.
NOV.
DEC.
34
28
25
37
31
35
44
58
32
26
23
YEAR 1924

No case of infectious disease was reported during the year.

The work of inspection has been carried out by Inspector W. Baron, who retired on superannuation at the end of October, in addition to his other duties as Port Sanitary Inspector, no special remuneration being provided for this part of his work. Inspector Holden has been appointed in his stead.

The following table shows the details of occupation and inspection during the past five years :—

No. of Inspections	1923	1924	1925	1926	1927
No. of Inspections	46	189	194	293	169
Males in Occupation	26	36	30	27	31
Females in Occupation... ...	14	14	13	9	8
Children in Occupation ...	5	6	5	2	3

PORT SANITARY ADMINISTRATION.

TABLE IIH.

Amount of Shipping entering the Port Sanitary District during the Year 1927.

		Number	Tonnage	Number Inspected		Number reported to be defective	Number of Orders Issued
				By the Med. Officer of Health	By the Sanitary Inspector		
Foreign	Steamers	239	335784	34	227	38	38
	*Motor	1	1291	...	1	...	...
	Sailing	...	...	...	...	...	...
Total Foreign ...		240	337075	34	228	38	38
Coastwise	Steamers	852	145094	21	642	212	212
	*Motor	13	4137	1	13	...	...
	Sailing...	9	4736	2	9	...	...
Total Coastwise ...		874	153967	24	664	212	212
Total Foreign and Coastwise ...		1114	491042	58	892	250	250

*Includes mechanically-propelled vessels other than steamers.

TABLE IIi.

Rats destroyed by dogs, traps and ferrets, and number of Baits set for destruction of Rats in 1927.

Number of	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.	Total In Year
Brown Rats	92	85	89	76	103	92	76	74	81	78	63	104	1013
Grey Rats	31	21	31	42	36	41	25	23	30	29	24	57	390
Rats examined .	...	...	...	...	...	...	...	..	...	...	...	...	...
Rats infected with Plague...	...	...	...	...	...	...	...	...	..	...	...	...	...
No. of Baits set.	1560	1200	1410	1320	1120	1420	1180	1100	1140	1120	950	2150	15670

TABLE IIj.

Report of Port Sanitary Work for the Year 1927.

Foreign	Steamships inspected	227
	Sailing Vessels inspected	—
	Motor Boats inspected	1
	Re-inspections	235
Coastwise	Steamships inspected	642
	Sailing Vessels inspected	9
	Motor Boats inspected	13
	Re-inspections	238
Condition of all Vessels inspected	Good	642
	Defective: Foreign 38 Coastwise 212	250

Foreign—22 Wear and Tear ; 48 Dirty.
Coastwise—6 Wear and Tear ; 598 Dirty. } Total 674

DEFECTS REMEDIED—

Forecastle re-painted	1
,, cleansed	153
Dirty Lockers, Washhouses, Store Rooms, etc., cleansed ...	214
Foul Water Tanks cleansed...	41
Foul and defective W.C.'s cleansed (151) and repaired (20) ...	171
Accumulations of Offensive Rubbish removed	43
Damp Quarters remedied	—
Leaky Decks overhead caulked	—
Defective Port-lights, Sky-lights and Dead-lights remedied ...	6
Defective Lavatories and Waste Pipes repaired	1
Defective Stove replaced	—
Dirty Galleys cleansed	40
Dirty Chain Lockers	4

The Chief Imports	Source	The Chief Exports	Destination
Wood Pulp	Canada, Germany, Sweden, Norway, and Finland	General	Dublin and Belfast
Timber	Canada, Norway, Russia, Roumania, Germany, Sweden and Finland	Coal and Coke ...... Machinery	Ireland ditto.
Stone	Norway, Wales & Scotland	Salt Cake	Baltic Ports
China Clay	Cornwall and Devon	Gas Retort Carbon	France
Potatoes	Ireland		
Live Stock	Dublin		
Esparto Grass	Oran and Azew		
Cement	London, Belgium and France		
General	Sweden, Belfast, Dublin, Germany, and Norway		
Whiting	London and Cornwall		
Motor Spirit	London and Texas via Amsterdam		
Slates	Wales		
Roof Tiles...........	France		
Round Timber......	Scotland & Ireland		
Grain	Belfast		
Sugar.................	Hamburg		

In addition to the measures of rat destruction as set forth in Table III, it should be stated that the Port Sanitary Authority employ a whole-time rat catcher, who acts under the instruction of the Port Sanitary Inspector. Every foreign ship is visited by the rat catcher and dealt with according to the necessity of the case. The methods used are trapping by cage and spring traps, rat-catching varnish, poisoning by phosphorus, squills, barium carbonate, etc., and killing by ferrets and dogs. Judging by the number of baits set it is estimated that a total number of 7,796 rats were destroyed in the year, of which 211 rats were caught in traps on ships arriving from foreign ports, and 529 by dogs, ferrets and traps. The net total rats caught is 740.

Precautionary measures were taken for the destruction of mosquitos and the larva both on the Dock and the lands adjoining. The measures taken were cleaning and clearing of weeds, etc., from stagnant pools and ditches, and then spraying periodically throughout the summer with paraffin and sulphate of copper.

Public Health (Unsound Food) Regulations, 1907.

List of Imported Articles Inspected.

Indian Corn, Wheat, Sugar, Potatoes.

List and Weight of Articles Condemned and Destroyed.

Nil.

THE PRESTON (SHELL FISH) REGULATIONS, 1923.

These regulations forbidding the picking of mussels for human food, in the estuary of the River Ribble, came into force in October, 1923. Since then placards have been posted in prominent places on both sides of the River and at Preston. The placards and notices were renewed during 1927. All the fishermen on both the north and south sides of the River and at Preston have been served with a copy of the notice. The mussel beds have been visited regularly by Inspector Henry S. Holden, who paid 20 visits to these beds during 1927.

Consequent upon an official complaint dated January 25th, 1927, received from the Town Clerk of Lytham St. Annes, to the effect that cockles taken from the foreshore at St. Annes had been submitted to bacteriological examination and found contaminated, a comprehensive examination of the cockle fishing in the whole estuary was undertaken.

Samples were taken at various points on both sides of the river, and on both sides of the Pinfold Channel. These samples were submitted to the Public Health Laboratory, Manchester, and as a result, a report was submitted to your Committee.

Samples were also submitted to the Fishmongers' Company. A public enquiry was held by the Health Committee representing the Port Sanitary Authority on September 14th, 1927.

The Committee decided to take no action with regard to the cockle layings on the south side of the Ribble, and to postpone a decision with regard to the northern side of the Estuary until after completion of the new intercepting sewer now under construction by the Borough of Lytham St. Annes.

III.—Food.

Major FINCH, F.R.C.V.S., D.V.S.M., Veterinary Surgeon,
reports as follows :

MILK SUPPLY.

Milk retailed in the Borough amounts approximately to 6,434 gallons daily, or 8 ounces per head per day, compared with 6,190 gallons daily and 8 ounces per head per day in 1926.

(*a*) Produced Daily in the Borough :

10 Cowkeepers in the Borough produce	354 galls.

(*b*) Retailed Daily in the Borough :

(1)	69 Dairies in the Borough retail	2379 galls.
(2)	6 Resident Kitters in the Borough retail	166 ,,
(3)	27 " Mixed Business " Shops retail	481 ,,
(4)	10 Cowkeepers in the Borough retail	364 ,,
(5)	96 Dairy Farmers outside the Borough retail ...	3044 ,,

There are 34 purveyors of sterilised bottled milk.

Cowkeepers in the Borough are producing daily 33 gallons less and retailing daily 205 gallons of milk less than the previous year.

Resident kitters in the Borough, who are reduced in number from 9 to 6, are retailing 166 gallons daily, as against 267 gallons in 1926.

The number of mixed shops remains the same and are retailing 20 gallons more than last year.

There are 96 dairy farmers outside the Borough as against 84 in 1926.

95% of the milk consumed is produced outside the Borough.

The figures as to the amount of milk sold are based upon estimates provided by the traders concerned. They are approximate only.

The supervision of the milk supply has necessitated the following work :

Visits to Dairies, Cowsheds and Milkshops in the Borough :

By Veterinary Officer	51
By Sanitary Inspectors	152

Number of Veterinary Examinations :

In the Borough	415

Number of samples of milk taken for examination :

	1924	1925	1926	1927
(*a*) For Tubercle Bacillus ...	229	291	174	325
(*b*) For contamination by dirt	304	204	133	214
(*c*) Under the Food and Drugs Acts	9	81	126	82

TUBERCULOSIS AND THE MILK SUPPLY.

The policy of frequent sampling for examination for the presence of the tubercle bacillus in milk has been continued. A total of 325 samples were taken from the various sources of supply by the Inspectors during the process of transit and delivery. The biological examination of these samples resulted in 18 market samples being found to contain the bacillus tuberculosis. These results are reported to the County Medical Officer of Health, who is responsible for the necessary enquiries as to the source of the infected milk.

The following table shows the percentage of market milks found to be infected with the bacillus tuberculosis during the past four years :—

MARKET MILK (Mixed Samples).

	1924	1925	1926	1927
Number of samples examined ...	162	235	137	325
Number bacillus tuberculosis found	19	14	12	18
Percentage	11·73	5·99	11·41	5·54

The responsibility of Local Authorities with regard to the Milk and Dairies Orders and tuberculous milk cannot be fulfilled in a satisfactory manner until a uniform system of veterinary inspection of all milking cattle throughout their areas has been adopted. This will undoubtedly reduce the amount of tuberculous milk by providing for the earlier discovery of animals suffering from tuberculosis of the udder and their removal from the herds. I am pleased to say that this system has been adopted by many Authorities throughout the country, and no doubt will be adopted as a general measure before very long.

Veterinary inspection of cattle to obtain a healthy milk supply is really of far more importance than the inspection of meat, because to a large extent the cooking of meat will remove any danger of contracting disease, whereas milk is largely consumed in an uncooked condition, and its production should therefore be under more careful supervision than it has been in the past. The grading of milk has led the way in providing tuberculosis-free milk supplies ; but the amount of milk which is produced under such grades is so small as to discount the value of grading very considerably. It is obvious that milk should be under careful supervision at the source of production, and such supervision can only be carried out by a uniform system of veterinary inspection of the milking cattle with a view to preventing the possibility of tuberculous milk being supplied to the public.

EXAMINATION FOR THE APPROXIMATE AMOUNT OF BUTTER FAT AND MANURIAL CONTAMINATION.

This examination is carried out by your Veterinary Officer. Two hundred and fourteen samples of milk were examined and 46 of these were found to be unsatisfactory. The following table compares the samples examined under this heading with those of previous years.

	1924	1925	1926	1927
Number of Samples examined	304	204	133	214
,, ,, unsatisfactory	79	77	39	46
Percentage of Samples unsatisfactory	26.0	37.74	29.32	21.5
Samples classified as unsatisfactory offended in one or more of the following particulars :—				
Manurial Contamination	74	47	32	44
Discoloured or bad odour	22	11	15	9
Premature souring	7	13	1	6
Deficient in fat	1	6	7	4

Bacterial Contamination.

In addition to the biological examination for the bacillus tuberculosis made by the Public Health Laboratories of the Liverpool and Manchester Universities, a microscopical examination and count is made to ascertain the presence of the colon bacillus, the bacillus enteritidis sporogenes and allied organisms whose normal habitat is manure. Three hundred and twenty-seven samples were examined during the year, and 85 of these showed freedom from any contamination whatsoever. Fifty-five showed contamination of a high degree.

Colon bacilli found present in the following dilutions of a cubic centimetre :

Cols. 1	2	3	4	5	6
1 cc.	1/10 cc.	1/100 c.c.	1/1000 c.c.	1/10000 cc.	1/100000 cc.
96	55	35	20	16	19

Streptococci	Bac. Enteritidis Sporogenes	Free from contamination in any dilution
13	7	85

The interpretation of the above table indicates in cols. 1, 2 and 3 slight unavoidable contamination, in col. 4 avoidable contamination, and in cols. 5 and 6 serious contamination. The presence of streptococci and the bacillus enteritidis in any of the above dilutions is also considered to indicate heavy manurial pollution or some disease of the udder.

The Public Health Department, as in previous years, has notified all Borough producers and retailers of unsatisfactory or contaminated samples, and this year in addition has also notified the County Medical Officer of Health and the Medical

Officer of Health of the Rural District in which the milk is stated to have been produced. Notifications to the producers enable them to take such steps as are necessary to improve their milk supplies and the notifications to the Medical Officer of Health of the Local Authorities enable them to co-operate with us in helping to improve the milk supply by visits of their Sanitary Officers to the farms. Col. C. J. Trimble, the Medical Officer of Health of the Preston Rural District Council has given valuable assistance in this respect.

The delivery of milk in bottles has become more general during the year. Only a small quantity of the bottled milk is "graded." The delivery of milk in bottles is an improvement on the old system of ladling it out of a churn into a small delivery can. On a dusty day milk is largely contaminated when it is being poured into a delivery can from an open churn. Any system to prevent this is an improvement. There is much room for improvement in the cleanliness of vehicles used for delivering milk, and this includes motor vans, milk floats and hand-carts. A clean vehicle is the best advertisement a milk retailer can have, and yet he seldom utilises so cheap and practical method of advertising his round.

MEAT AND FOOD INSPECTION.

In enforcing Part VI of the Meat Regulations, 1924, it has been found necessary to pay special attention to conditions at the Public Abattoir. With that object, Sec. 116 of the Preston Corporation Act, 1914, which requires the registration of all slaughtermen employed in the Public Abattoir, has been put in operation. This gives the Local Authority certain disciplinary powers and will, in time, enhance the status of slaughtermen employed at the Abattoir. It is unfortunate that accommodation for the butchers' clothes and personal cleanliness is lacking, as such would help in raising the standard of cleanliness amongst those engaged in the trade.

In the winter time the major part of the killing is done by artificial light, so that improved lighting is necessary in the interests of cleanliness, the avoidance of cruelty to animals, and the efficient inspection of the meat. The Market and Abattoir is lighted by gas.

The conveyance of meat from the Abattoir to the shops is supervised as well as possible. A successful prosecution for an infringement of Part VI of the Regulations has brought about an improvement in the methods of handling.

As in the case of shops and stalls, an infringement of the Regulations is usually the result of carelessness; deliberate defiance rarely occurs, a few moments' talk being all that is required to secure compliance.

The exposure of meat to wind-borne filth and handling by prospective customers which the open shop-window allows, still continues, however. Until a public educated in these matters demands food absolutely clean, little can be done with legislation as it is. The shops are watched carefully, and during the year an official warning was served.

MARKETS.

The Saturday Market consists of 15 butchers' stalls. It is under regular supervision and although capable of improvement is managed in such a manner as to protect the meat from contamination.

Fowls, butter, rabbits and eggs have a special Saturday market in and about the Public Hall. It is under regular supervision (1166 visits being paid) and the quality and soundness of the goods displayed is satisfactory.

Fruit.

There is a wholesale market daily and retail trade on market days. The quality and soundness of the goods displayed are satisfactory.

Fish.

There is a wholesale market every morning at the Fish Market, L.M.S. Railway Station, and retail sales daily in the covered market. The quality of the fish is satisfactory. The amounts dealt with and found unsatisfactory are seen in Table IIIa.

The wholesale Fish Market is regularly supervised by Inspector Crossthwaite, 305 visits having been paid. The retail markets (1,110 visits) are also continuously examined.

The neighbouring Port of Fleetwood supplies the largest amount of fish to the town and the outlying districts, although consignments are received almost daily from many other fishing centres, viz. :—

Wet Fish—Grimsby, Milford Haven, Hull, Swansea, Peterhead, Glasgow, Campbeltown, Rothesay, Oban, Liverpool, Eyemouth, Baltimore, Londonderry and Killibegs.

Dry Fish—Lowestoft, Yarmouth, Hull, Fraserburgh, and Wick.

Shell Fish—Cark-in-Cartmell and Barra (Oban).

Rabbits—Dumfries, Kirksanton (Carnforth), Lazonby, Dalbeattie and Hereford.

The quantity of goods reaching the markets and the amount condemned are as follows :—

TABLE IIIa.

Weight	Rabbits, Game. Poultry,			Fruit and Vegetables.			Wet Fish.			Dry Fish.			Shell Fish.			Totals.		
	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.
Examined	43	14	2	1	0	0	3418	9	2	298	10	2	91	16	2	3853	11	0
Condemned	0	5	0	1	0	0	2	19	1	1	1	0	0	19	2	6	5	0

SLAUGHTERHOUSES.

There are 12 private slaughterhouses remaining on the register. Of these two are only used for killing a few sheep and calves weekly and an occasional beast. One is used entirely for pigs. The following table shows the number of animals slaughtered and inspected at the public abattoir and private slaughterhouses respectively.

TABLE IIIb.

	Cattle		Sheep		Pigs		Calves	
	Killed	Inspd.	Killed	Inspd.	Killed	Inspd.	Killed	Inspd.
Public Abattoir ...	4357 *+430*	4374 *+449*	24033 *+2427*	24281 *+3260*	2439 *+469*	3284 *+ 731*	885 *— 7*	909 *+ 7*
Private Slaughter-houses	3160 *+412*	3160 *+412*	19876 *—250*	16765 *—1140*	1908 *—576*	6988 *+ 710*	542 *+84*	542 *+84*
Total Increase or Decrease	*+842*	*+861*	*+2177*	*+2120*	*—47*	*+1441*	*+77*	*+91*

The above table indicates the increase of animals killed and inspected as compared with the previous year. It shows a considerable increase in all the tables with the exception of that part relating to pigs, where a small decrease in the number slaughtered in the Borough is shewn and accounted for by a steady increase in the number of farm-killed and dressed pigs. This practice, provided for as an exceptional circumstance in the Regulations, is now becoming the regular practice.

The killing of immature calves is still carried on in this part of the country. So much is this the case that it is difficult for a high-class butcher to get calves of sufficient age and nourishment to make good veal. Endeavours are being made to raise the standard by degrees.

The slaughter of animals for "casualty" reasons has necessitated a good deal of extra vigilance and care on the part of the inspectorial staff.

Owing to the prolonged wet seasons, Distomatosis (Liver Fluke) has become very prevalent in both cattle and sheep. Fortunately, the only organ affected is the liver, and only in advanced cases of the disease is the food value of the carcase in any way minimised. None the less, the economic loss through the great number of livers which have to be condemned (17,281 lbs.) is very considerable. The use of liver for human food has become of increasing importance, as it has been discovered recently that a liver diet in certain diseases has a beneficial and curative effect. The careful inspection of these organs is, therefore, of extreme importance.

TABLE IIIc.

	Veterinary Officer	Meat Inspector
Visits to Public Slaughterhouses	240	308
Visits to Private Slaughterhouses	1554	560
Visits to Butchers Shops and other premises	872	221

TABLE IIId.
Weight of Meat condemned as unfit for human consumption at the Public Abattoirs, Private Slaughterhouses and Dock Slaughterhouses.

	Whole Carcases	Part Carcases	Offal	Total	Increase or Decrease
	lbs.	lbs.	lbs.	lbs.	lbs.
Cattle ...	229348	26337	69172	324857	*+44834*
Sheep ...	5779	280	2832	8891	*+ 2010*
Pigs ...	8841	812	10297	19950	*— 3945*
Calves ...	7168	120	175	7463	*+ 776*
				361161	*+43675*

161 tons, 4 cwts. 2 qrs. 17 lbs.

The total increase of meat condemned is 43,675 lbs., and of this amount the major portion is under the heading of cattle. There is a decrease in the amount of pork and pig offals condemned, amounting to 3,945 lbs. This is interesting, and indicates that the policy mentioned in the last report of discussing preventive measures with the owners has had the beneficial effect of reducing the incidence of the disease; and this decrease is the more remarkable when one takes into consideration the increased numbers of carcases examined.

TABLE IIIe.
Number of whole carcases and offals condemned as unfit for food on account of Tuberculosis and other conditions.

	Tuberculosis.				Other Conditions.			
	Cattle	Sheep	Pigs	Calves	Cattle	Sheep	Pigs	Calves
Whole Carcases.	297	...	28	3	169	140	35	174
Head	366	...	428	1	56	13	1	...
Lungs	1914	...	509	10	189	62	84	10
Liver	315	...	431	3	1258	808	101	5
Heart	123	...	420	10	24	45	53	3
Spleen	141	...	9	...	15	...	1	...
Kidneys	303	...	106	2	149	...	9	...
Udder	166	...	...	...	713	...	6	...
Stomach	70	...	...	...	11	...	...	...
Skirts	219	...	...	...	12	...	...	...
Mesentery	252	...	40	...	11	...	...	...
Intestines	24	...	...	...	22	...	...	...

TABLE IIIf.

Causes of Condemnation in detail.

The weight (lbs.) of meat condemned, the cause of condemnation and the class of animal.

Disease	Cattle	Sheep	Pigs	Calves
Tuberculosis	206040	...	14430	461
Distomatosis	15092	2189	...	...
Mammitis (Septic)	8354	120	...	...
Mastitis (Non-septic)	4019	...	5	...
Fevered (incl. Physicked)	20804	60	...	110
Metritis (Septic)	9550	...	...	...
Actinomycosis	1372	...	...	...
Parasitic Cysts (inc. Echinococcus Veterinorum and Cyst Cellulosæ	1308	286	493	...
Dropsy and Emaciation	23265	2664	716	801
Cirrhosis of Liver	691	17	304	...
Abscess	2038	37	119	38
Fatty Degeneration	740	42	...	4
Angioma of Liver	982	...	...	...
Pyæmia	830	...	220	245
Septicæmia	1700	...	200	...
Pneumonia (Septic)	6048	...	320	186
Pericarditis (Septic)	470	...	...	...
Peritonitis (Septic)	950	...	...	...
,, (Non-septic)	2943	40	110	100
Pneumonia, Pleurisy and Pericarditis	2223	98	408	179
Emphysema	56	...	...	30
Nephritis	67	...	7	...
Piroplasmosis	500	...	...	...
Congestion of Lungs	195	...	...	...
Malignant Neoplasms	1157	...	...	...
Johnès Disease	525	...	...	...
Asphyxia	650	1740	260	186
Necrosis	181	...	14	...
Black Quarter	700	...	...	...
Bruising and Fractures	5706	437	263	108
Lipomatosis	95	...	...	...
Decomposition	5606	649	608	100
Moribund	...	415	120	125
Immaturity	...	30	30	4675
Jaundice	...	60	683	...
Arthritis	...	7	...	...
Acute Swine Erysipelas	...	...	340	...
Urinous Odour	...	...	300	...
Enteritis	...	...	...	114
Totals (lbs.)	324857	8891	19950	7463

These figures are somewhat similar to those of the previous year, with the exception of an increase under the heading of distomatosis (liver fluke) in both cattle and sheep, the cause of which has already been alluded to. Many of the diseases stated are not those commonly met with in apparently healthy cattle, but are found in animals which have been sent for emergency slaughter, hence the list is rather comprehensive.

TABLE IIIG.

Number of whole carcases condemned for the diseases stated :—

Disease	Cattle	Sheep	Pigs	Calves
Tuberculosis	297	...	28	3
Dropsy and Emaciation	59	67	8	11
Malignant Neoplasms	2	...	...	...
Septic Mammitis	16	1	...	...
Septic Metritis	17	1	...	...
Decomposition	1	19	4	2
Peritonitis	7	1	3	1
Septic Pericarditis	1	...	...	...
Septicæmia	4	...	1	...
Pyæmia	2	...	1	5
Gangrene	2	...	...	...
Odour and Physic	3	...	...	...
Pneumonia, Acute	3	1	1	2
,, Septic	10	...	2	3
Piroplasmosis	1	...	...	...
Bruising and Fractures	3	4	...	...
Jaundice	...	1	5	...
Asphyxia	2	33	1	1
Cyst Cellulosæ	...	...	1	...
Pleurisy	...	...	1	...
Septic Peritonitis	1	...	...	...
Urinous	...	...	1	...
Moribund	...	8	1	4
Immaturity	...	2	2	140
Black Quarter	1	...	...	...
Fevered	33	1	...	2
Swine Erysipelas	...	...	3	...
Emphysema	...	...	...	1
Enteritis	...	...	...	2
Mastitis	1	...	...	...
Totals	466	139	63	177

CONTAGIOUS DISEASES OF ANIMALS ACTS.

The diseases scheduled under the above are :—

- Anthrax
- Foot and Mouth Disease
- Parasitic Mange (Horses)
- Epizootic Abortion (Cattle)
- Rabies
- Sheep Scab
- Swine Fever
- Cattle Plague
- Pleuro-Pneumonia
- Sheep Pox
- Epizootic Lymphangitis
- Glanders and Farcy
- Tuberculosis (Cattle)

It is the duty of the Local Authority to carry out the work in connection with these diseases. The procedure is laid down in the respective Orders made by the Ministry of Agriculture. The administration of the various Orders has necessitated the inspection of all live animals at the Cattle Market and Saleyard, also the inspection of all cattle in the cowsheds within the Borough area.

Number of Visits to Cattle Market and Saleyard ...	146
Number of Visits to Other Premises	47

Number of Animals Inspected at		Cattle	Sheep	Pigs	Calves	Horses
Cattle Market	1927	39042	123121	30007	11505	1730
	1926	31937	85683	16095	11486	1479
Other Premises	1927	390	...	17	...	42
	1926	626	40	...	...	37
TOTALS	1927	39432	123121	30024	11505	1772
	1926	32563	85723	16095	11486	1516

ANTHRAX.

Five suspected cases of anthrax were reported during the year. Microscopic examination of the blood was carried out and this proved negative in each case.

FOOT AND MOUTH DISEASE.

The disease made its appearance in the Lancaster Area on two occasions during 1927. First at Galgate in April, when two neighbouring farms were affected, and again on December 30th, when one farm at Heaton-with-Oxcliffe and another farm at Overton were affected. In the latter outbreaks eight out of a total of 108 cattle were affected. In consequence of these outbreaks the necessary restrictions were put into force, and the Cattle Market was closed on April 6th until April 11th, and again on December 30th this area was scheduled as a controlled area. On December 30th the Dairy Sale was suspended pending instructions from the Ministry, and later instructions came through permitting movement under licence and 21 days' detention at destination.

The following is a return of the number of outbreaks confirmed by the Ministry during the last five years :

Year	Outbreaks Confirmed	Animals slaughtered as diseased or exposed to infection
1927 ...	114	9610
1926 ...	208	20870
1925 ...	255	19692
1924 ...	1515	88850
1923 ...	1854	125098

PARASITIC MANGE.

One case reported and confirmed. The disease involved one animal only and after treatment and disinfection of premises restrictions were removed.

TUBERCULOSIS (IN CATTLE).

Under the 1925 Order, six suspected cases of Tubercular cows in the Borough area were reported and investigated. The following table gives particulars of these :—

	Total No. of Animals reported as diseased	No. with T.B. of the udder	No. with T.B. emaciation	No. otherwise affected	No. not affected
Cows in Milk ...	4	2	...	2	...
Other Cows and Heifers ...	2	...	...	...	2
Total ...	6	2	...	2	2

The four animals affected were dealt with under the terms of the Order, and compensation amounting to £15 was paid to the owners. Of this amount three-quarters was recoverable from the Ministry of Agriculture. There was no salvage value.

In addition, 35 animals were sent in on licence from the surrounding Local Authorities for slaughter under Form D, Article 5 of the Tuberculosis Order.

As a result of inspection, a further 20 animals were removed from the Cattle Market by order of your Veterinary Officer. Of this number 14 were slaughtered in the Borough and six were returned to the premises from which they came to be dealt with by the Local Authorities concerned. The majority of these animals were, when killed, found unfit for food, and were surrendered. Particulars of these are included in the tables given in the meat inspection returns.

The following table classifies all cattle dealt with under the Tuberculosis Order :

Tubercular Animals	No.	Giving T.B. Milk	Suffering from : T.B. Udder	Suffering from : T.B. Emaciation	Chronic Cough and showing definite signs of T.B.
Sent in by Local Authorities	35	1	20	2	12
Removed from Cattle Market	20	...	17	1	2

SWINE FEVER.

No cases were reported. In order to prevent the spread of swine fever through infected pigs coming to the Market, proper disinfection of both vehicles and pens is carried out, and the animals are all inspected.

EPIZOOTIC ABORTION.

This disease, although prevalent in dairying stock, only concerns the Local Authority in so far as the exposure in a market, etc., of an animal known to be suffering from this disease is an offence against the Epizootic Abortion Order, 1922. Posters explaining this Order are renewed from time to time at the Cattle Market.

SHEEP SCAB.

Premises infected during the end of the previous year were still under control at the commencement of the year. After destruction of all infected material, the premises were declared free.

There were no cases suspected or reported of Cattle Plague, Epizootic Lymphangitis, Glanders (or Farcy), Rabies, Pleuro-Pneumonia and Sheep-Pox.

ORDERS ISSUED BY THE MINISTRY OF AGRICULTURE AND FISHERIES DURING 1927.

In addition to the many Foot-and-Mouth Disease Orders, the following list of new Orders were issued during the year :—

Date of Operation.	
March 1.	Foot-and-Mouth Disease (Boiling of Animal Foodstuffs) Order of 1927.
April 1.	Importation of Carcases (Prohibition) (Amendment) Order of 1927.
May 10.	Animals (Landing from Ireland, Channel Islands and the Isle of Man) (Amendment) Order of 1927.
June 1.	Transit of Animals Order of 1927.
,, 1.	Animals (Miscellaneous Provisions) Order of 1927.
,, 1.	Amendment to Transit of Animals Order of 1927.
July 13.	Foot-and-Mouth Disease (Boiling of Animal Foodstuffs) (No. 2) Order of 1927.
Oct. 6.	Markets, Sales and Lairs (Amendment) Order of 1927.
,, 6.	Amendment to Reg. (5) of the Schedule to the Importation of Animals Act, 1922 (Session 2).
Nov. 1.	Amendment of Chap. 6 (Protection of Animals) of the Foreign Animals Order of 1910, and in Part 7 (Protection of Animals) of the Importation of Canadian Cattle Order of 1923.
,, 21.	Exportation of Transit of Horses, Asses and Mules (Amendment) Order of 1927.
Dec. 1.	Importation of Dogs (Amendment) Order of 1927.

IMPORTATION OF LIVE STOCK FROM IRELAND.

The following figures shew the number of animals landed during the year as compared with those of the two previous years :—

	Cattle	Sheep	Pigs	Asses	Goats
1927	16594	28475	34	31	1
1926	18934	30547	327	...	...
1925	18726	28780	107	3	1

The number of those which had to be slaughtered for emergency reasons is as follows :—

	Cattle	Sheep	Pigs
1927	8	212	...
1926	23	578	2
1925	9	307	2

These carcases were carefully inspected before being passed as fit for food ; any carcases or portions condemned being included in the general list under meat and food inspection tables. The veterinary inspection of all live animals arriving at the Dock lairage is carried out by the officials of the Ministry of Agriculture and Fisheries.

FRIED FISH SHOPS.

Have been the subject of 178 visits by the District Inspectors. The conditions are satisfactory in most instances.

SALE OF FOOD AND DRUGS ACT.

In the following tables the work done in connection with the Sale of Food and Drugs Acts is summarised.

In the first table are shown all those samples among which adulteration was proved. In the second part of the table are shewn all those samples among which no adulteration was proved, but which were submitted to special comment by the Public Analyst, usually on account of the addition of preservatives. 3.8 per cent. of the milk samples were found to be adulterated, compared with none in 1926, 12.5 per cent. adulterated in 1925, 11.1 in 1924, 0.7 in 1923, and 7.1 in 1922. The adulterated samples consisted of informal samples of spirituous liquors found to be under the legalised strength.

The special reports of the Public Analyst called attention to a number of deleterious substances which had either been added to or had reached the article of food in course of preparation.

Copper sulphate is used to produce a bright green colour in tinned vegetables, and salicylic acid and sulphurous acids are used as preservatives.

Stringent regulations have recently been issued forbidding the use of copper sulphate and regulating the amount and nature of preservatives which may be used.

The Public Analyst reports on the composition of all milk samples submitted under the Sale of Food and Drugs Acts from the County Borough of Preston for the years 1925, 1926 and 1927, as follows :—

	1925	1926	1927
No. of samples submitted	80	126	82
Average percentage of fats	3.99	4.54	4.41
Average percentage of non-fatty solids...	8.98	8.90	8.96
Average percentage of total solids ...	12.97	13.44	13.37

TABLE IIIh.

Article	Number Analysed	Number Genuine	Number Adulterated	Ref. No. of Adulterated Samples	Formal	Informal	Amount of Adulteration	Action taken
Whiskey	19	8	11	409 439	... 1	1 ...	36·4° u.p.; slightly too weak. Contained spirit of proof strength 63·3% Contained water ... ... 36·7% 100·0% and was 36·7° u.p., which is 1·7° below the statutory limit and therefore contained 2·6% of excess water.	Formal sample taken, No. 439. Cautionary letter sent by Town Clerk.
				437	...	1	Contained spirit of proof strength 49·7% Contained water ... ... 50·3% 100·0% and was 50·3° u.p., which is 15·3° below the statutory limit, and therefore contained 23·5% of excess water.	Formal sample taken, No. 453.
				453	1	...	Contained spirit of proof strength 50·3% Contained water ... ... 49·7% 100·0% and was 49·7° u.p., which is 14·7° below the statutory limit and therefore contained 22·6% of excess water.	Case heard 6/4/27. Fined £5, which included witnesses' fee 5/-.
				470	...	1	Contained spirit of proof strength 62·7% Contained water ... ... 37·3% 100·0% and was 37·3° u.p. which is 2·3° below the statutory limit and therefore contained 3·5% of excess water.	No action taken.

TABLE IIIH. (Continued).

Article	Number Analysed	Number Genuine	Number Adulterated	Ref. No. of Adulterated Samples	Formal	Informal	Amount of Adulteration	Action taken
Whiskey				527	...	1	Contained spirit of proof strength 59·0% Contained water ... ... 41·0% 100·0% and was 41·0° u.p., which is 6.0° below the statutory limit and therefore contained 9·2% of excess water.	Formal sample taken, No. 550.
				550	1	...	Contained spirit of proof strength 58·5% Contained water ... ... 41·5% 100·0% and was 41·5° u.p., which is 6·5° below the Statutory limit and therefore contained 10% of excess water.	Case heard 15/7/27. Fined £10, advocate's fee £2/2/- and analyst's fee £1/1/-.
				579	...	1	36·0° u.p.	No action taken.
				704	...	1	36·0° u.p.	Do.
				704	...	1	36·0° u.p. Slightly too weak.	Do.
				705	...	1	36·0° u.p. do.	Do.
				745	...	1	36·0° u.p. do.	Do.
Brandy	11	8	3	526	...	1	Contained spirit of proof strength 62·1% Contained water ... ... 37·9% 100·0% and was 37·9° u.p., which is 2·9° below the statutory limit and therefore contained 4·4% of excess water.	Formal sample taken, No. 551.
				551	1	...	Contained spirit of proof strength 62·4% Contained water ... ... 37·6% 100·0% and was 37·6° u.p., which is 2·6° below the statutory limit and therefore contained	Cautionary letter sent by Town Clerk.

Brandy				545	...	1	Contained spirit of proof strength 52·0% Contained water ... ... 48·0% 100·0% and was 48·0° u.p. which is 13·0° below the statutory limit and therefore contained 20·0% of excess water.	No action taken.
Gin	6	...	6	411	...	1	Contained spirit of proof strength 60·3% Contained water ... ... 39·7% 100·0% and was 39·7° u.p., which is 4·7° below the statutory limit and therefore contained 7·2% of excess water.	Formal sample taken, No. 440.
				440	1	...	Contained spirit of proof strength 59·9% Contained water ... ... 40·1% 100·0% and was 40·1° u.p., which is 5·1° below the statutory limit and therefore contained 7·8% of excess water.	Cautionary letter sent by Town Clerk.
				436	...	1	Contained spirit of proof strength 62.4% Contained water ... ... 37·6% 100·0% and was 37·6° u.p., which is 2·6° below the statutory limit and therefore contained 4·0% of excess water.	No action taken.
				581	...	1	36·0° u.p.	Do.
				598	...	1	36·0° u.p. Slightly too weak.	Do.
				740	...	1	36·0° u.p. do.	Do.
Rum	14	6	8	469	...	1	Contained spirit of proof strength 58·5% Contained water ... ... 41·5% 100·0% and was 41·5° u.p., which is 6.5° below the statutory limit and therefore contained 10·0% of excess water.	Formal sample taken, No. 480.

TABLE IIIH. (Continued).

Article	Number Analysed	Number Genuine	Number Adulterated	Ref. No. of Adulterated Samples	Formal	Informal	Amount of Adulteration	Action taken
Rum				480	1	...	Contained spirit of proof strength 60·1% Contained water ... ... 39.9% 100·0% and was 39·9^0 u.p., which is 4·9^0 below the statutory limit and therefore contained 7·5% of excess water.	Cautionary letter sent by Town Clerk.
				580		1	Contained spirit of proof strength 58·5% Contained water ... ... 41·5% 100·0% and was 41·5^0 u.p., which is 6.5^0 below the statutory limit and therefore contained 10·0% of excess water.	Formal sample taken, No. 608.
				608	1	...	Contained spirit of proof strength 61·5% Contained water ... ... 38·5% 100·0% and was 38·5^0 u.p., which is 3·5^0 below the statutory limit and therefore contained 5·4% of excess water.	Cautionary letter sent by Town Clerk.
				648	...	1	Contained spirit of proof strength 60·9% Contained water ... ... 39·1% 100·0% and was 39·1^0 u.p., which is 4·1^0 below the statutory limit and therefore contained 6·3% of excess water.	Formal sample taken, No. 666.

Rum				666	1	...	Contained spirit of proof strength 63·0% Contained water ... ... 37·0% 100·0% and was 37·0° u.p., which is 2·0° below the statutory limit and therefore contained 3·0% of excess water.	Cautionary letter sent by Town Clerk.
Milk	82	79	3	706	...	1	36·0° u.p. Slightly too weak.	No action taken.
				742	...	1	36·0° u.p. do.	Do.
				758	...	1	Contained 3·30% fat 8·22% other solids 11·52% total solids and that calculating on the basis of the limit for non-fatty solids fixed by the Board of Agriculture, the sample contained 3·0% of added water.	No action taken.
				772	...	1	Contained 3.65% fat 8·35% other solids 12·00% total solids Slightly watered.	No action taken.
				629	1	...	Contained 2·15% fat 9·31% other solids 11·46% total solids and that calculating on the basis of the limit for fatty solids fixed by the Board of Agriculture, the original milk has been deprived of 28·0% of its milk fat.	The case came before the Court on the 7th Nov., 1927, and the Magistrates' decision was that it was a proper case to bring, but dismissed the case.

TABLE IIIi.

Articles Purchased	Informal	Formal	Ref. No.	Special Report by Public Analyst	Action taken
Sponge Cake	1	...	401	Contained foreign ingredient, 1,500 parts of borates, calculated as boracic acid per million parts of the sample.	No action taken.
	1	...	403	Contained foreign ingredient 1,800 parts of borates, calculated as boracic acid per million parts of the sample.	Do.
Meat Preservative ...	1	...	426	Consisted of Boric Acid ... ... 74·0% Borax (dehydrated) ... 26·0% 100·0%	Warning letter to user.
Do. do. ...	1	...	531	Consisted of Sodium chloride ... ... 50·0% Boric acid ... ... 21·0% Sodium sulphite ... ... 21·0% Sodium sulphate ... ... 8·0% 100·0% Such a mixture as this cannot lawfully be used as a preservative.	Do.
Do. do. ...	1	...	635	Consisted of Ground Rice ... ... 89·6% Salt ... ... 7·6% Pot. Nitrate ... ... 2·7% Borates, cal. as boracic acid ·1% 100·0% Contained 1,000 parts borates per million.	No action taken.
Ground Rice	1	...	427	Foreign ingredients as under— Calcium sulphate... ... 45·0% Cream of tartar ... ... 23·0% Calcium and sodium acid phosphates ... ... 20·0% Large quantity of calcium sulphate renders this article, in my opinion, injurious to health.	Further sample taken and found genuine.
Rice Cake	1	...	428	Foreign ingredient as under— 14·0% of mineral matter, consisting largely of calcium sulphate.	No action taken.

Gregory Powder	1	...	433	Contained foreign ingredient as under— 9·0% of magnesium carbonate.	No action taken.
Ammoniated Quinine Capsules	1	...	431	Contained 0·3 grains of quinine sulphate per capsule and was therefore deficient in quinine sulphate, to the extent of 65%. The sample was almost entirely devoid of ammonia. According to formula No. 014 of the Pharmaceutical Journal Formulary, each capsule should contain 0·86 grains of quinine sulphate and 2·14 grains of ammonium chloride. The weight of the capsules varied from 5 to 9 grains, the average weight being $7\frac{3}{4}$ grains.	Letter to Manufacturer and Retailer.
Aspirin Tablets (5 gns.) ...	1	...	434	Genuine ; contained 5 grains of aspirin per tablet.	No action taken.
	1	...	558	Genuine ; contained 5 grains of aspirin per tablet.	Do.
Tinned Sardines	1	...	446	Contained foreign ingredients as under— 0·28 grains of lead and 1·1 grains of tin per lb.	Do.
Phospherine	1	...	489	Genuine ; contained $1\frac{1}{4}$ grains quinine sulphate and 10 minims concentrated phosphoric acid B.P. in two fluid ounces.	Do.
	1	...	751	Genuine ; the contents of the bottle measured 2 fluid drachms and contained 0·6 gr. of quinine sulphate and 65 minims of acid phosphoric dil. B.P.	Do.
Indian Brandy	1	...	491	Was devoid of sweet spirits of nitre. Should contain not less than 30·0% sweet spirits of nitre.	Letter from M.O.H. dated 12/4/27, stating result.
Absorbent Compound ...	1	...	549	Consisted of a mixture of rice and potato starches with a little pepper, containing 1,600 parts of sulphur dioxide per million parts of sample.	No action taken.
Lemon Squash	1	...	586	Genuine ; contained 70 parts per million sulphur dioxide.	Do.
Coffee Extract	1	...	590	Genuine ; contained coffeine equivalent to 17% dry coffee extract or 68% dry coffee.	Do.
Dried Apricots	1	...	591	Genuine ; contained 240 parts sulphur dioxide per million.	Do.
Dried Peaches	1	...	592	Genuine ; contained 400 parts sulphur dioxide per million.	Do.
Dried Pears	1	...	593	Genuine ; contained 540 parts sulphur dioxide per million.	Do.

TABLE IIIi. (Continued).

Articles Purchased	Informal	Formal	Ref. No.	Special Report by Public Analyst	Action taken
Dried Milk	I	...	710	Genuine and correctly labelled; contained fat 25·20%, proteids 22·60%, milk sugar 32·50%, mineral matter 5·78%, moisture 7·78%, cane sugar 6·14%.	No action taken.
Bacon	I	...	727	Genuine; contained 5 parts of Formaldehyde per million, probably due to the process of curing.	Do.
Sausage	I	...	408	Contained Pork (mainly fat) ... ... 45·0% Bread ... ... 32·0% Seasoning ... ... 1·0% Added water ... ... 22·0% 100·0% and was deficient in meat. Sausages should contain not less than 50·0% of meat.	Formal sample taken, No. 441.
	...	I	441	Contained Pork (mainly fat) ... ... 45·0% Filler ... ... 32·5% Seasoning ... ... 1·0% Added water ... ... 21·5% 100·0% and was therefore deficient in meat. Sausages should contain not less than 50·0% of meat.	Copy of report sent to Manufacturer.
	I	...	602	Genuine; contained 58·0% meat, and 165 parts per million sulphur dioxide.	No action taken.
	I	...	603	Genuine; contained 52·0% meat, and was free from preservatives.	Do.
	I	...	686	Foreign ingredient as under— Contained 270 parts borates, calculated as boracic acid per milliom parts of the sample. Contained 68·0% meat.	Do.
	I	...	687	Genuine; free from preservatives; contained 68·0% meat.	Do.
	I	...	688	Contained only 45·0% meat and was therefore deficient in meat. Contained also 100 parts	Do.

Sausage	1	...	689	Genuine; contained 57·0% meat and free from preservatives.	
	1	...	690	Genuine; contained 51·0% meat and free from preservatives.	
	1	...	691	Genuine; contained 58·0% meat and free from preservatives.	
	1	...	692	Genuine; contained 71·0% meat and free from preservatives.	
	1	...	693	Genuine; contained 60·0% meat and 80 parts sulphur dioxide per million.	
	1	...	694	Genuine; contained 57·0% meat and 125 parts sulphur dioxide per million.	
	1	...	695	Genuine; contained 63·0% meat and 25 parts sulphur dioxide per million.	
	1	...	696	Genuine; contained 61·0% meat and 30 parts sulphur dioxide per million.	
	1	...	697	Genuine; contained 58·0% meat and 40 parts sulphur dioxide per million.	
	1	...	698	Genuine; contained 54·0% meat and 50 parts sulphur dioxide per million.	
	1	...	699	Genuine; contained 50·0% meat and 65 parts sulphur dioxide per million.	
	1	...	700	Genuine; contained 62·0% meat and 55 parts sulphur dioxide per million.	
	1	...	701	Genuine; contained 60·0% meat and free from preservatives.	
	1	...	702	Genuine; contained 76·0% meat and free from preservatives	
	1	...	714	Contained only 38·0% of meat and was therefore deficient in meat. The sample was free from preservatives.	Formal sample taken, No. 736.
	...	1	736	Contained Meat ... ... 43·0% Bread ... ... 25·0% Seasoning ... ... 1·0% Added water ... ... 31·0% 100·0% and was therefore deficient in meat.	Copy of report sent to Manufacturer.
	1	...	715	Contained only 38·0% of meat and was therefore deficient in meat. The sample was free from preservatives.	Formal sample taken, No. 735.

TABLE IIIi. (Continued).

Articles Purchased	Informal	Formal	Ref. No.	Special Report by Public Analyst	Action taken
Sausage	...	1	735	Contained Meat ... ... 46·0% Bread ... ... 28·0% Seasoning ... ... 1·0% Added water ... ... 25·0% 100·0% and was therefore deficient in meat.	Copy of report sent to Manufacturer.
	1	...	718	Contained foreign ingredient as under— 700 parts of borates, calculated as boracic acid per million parts of the sample.	
	...	1	737	Genuine ; contained 69·0% meat.	
	1	...	719	Genuine ; contained 79·0% meat and free from preservatives.	
	1	...	720	Genuine ; contained 65·0% meat and free from preservatives.	
	1	...	721	Genuine ; contained 59·0% meat and free from preservatives.	
	1	...	722	Contained only 46·0% of meat and was therefore deficient in meat. The sample was free from preservatives.	Formal sample taken in 1928.
	1	...	723	Genuine ; contained 57·0% meat and 115 parts of sulphur dioxide per million parts of the sample.	No action taken.
	1	...	724	Genuine ; contained 53·0% meat and was free from preservatives.	Do.

Public Health Milk and Cream Regulations, 1912-1917.

Particulars of Samples taken for Preservatives in Milk and Cream, Year ended 31st December, 1927.

Articles Purchased.	Number Analysed	Number Genuine	Sample Number	Report	Action Taken
Cream	3	3	478	Genuine ; contained fat 35·4% ; no preservatives.	No action taken.
			479	Genuine; contained fat 50·0% ; no preservatives.	Do.
			753	Genuine ; contained fat 54·6% ; no preservatives.	Do.
Tinned Cream	8	8	518	Genuine ; contained fat 26·5% ; no preservatives.	Do.
			519	Genuine ; contained fat 26·0% ; no preservatives.	Do.
			520	Genuine ; contained fat 20·0% ; no preservatives.	Do.
			537	Genuine ; contained fat 20·5% ; no preservatives.	Do.
			712	Genuine ; contained fat 24·0% ; no preservatives.	Do.
			717	Genuine ; contained fat 25·4% ; no preservatives.	Do.
			725	Genuine ; contained fat 20·4% ; no preservatives.	Do.
			726	Genuine ; contained fat 20·0% ; no preservatives.	Do.
Preserved Cream	3	3	399	Genuine ; contained fat 51·6% ; borates 0·15%.	Do.
(·4% boric acid) ...			402	Genuine ; contained fat 52·3% ; borates 0·26%.	Do.
			711	Genuine ; contained fat 45·4% ; borates 0·25%.	Do.
Condensed Milk	5	5	465	Genuine ; contained fat 9·39%, proteids 9·12%, milk sugar 13·18%, mineral matter 2·04%, added sugar 40·50% ; total solids 74·23%, and was correctly labelled.	Do.
			517	Genuine ; contained fat 10·10%, proteids 8·26%, milk sugar 12·02%, mineral matter 1·82% ; total solids 32.20%, and was correctly labelled.	Do.
			554	Genuine ; contained fat 0·9%, proteids 9·5%, milk sugar 15·2%, added sugar 45·0%, mineral matter 2·1% ; total solids 72·7%.	Do.
			555	Genuine ; contained fat 9·14%, proteids 9·12%, milk sugar 14·0%, added sugar 41·2%, mineral matter 1·89% ; total solids 75·35%.	Do.
			713	Genuine and correctly labelled ; contained fat 9·05%, proteids 8·57%, milk sugar 13·24%, mineral matter 1·94% ; total solids 32·80%.	Do.

One hundred and eighty-three additional informal samples of the following were also taken and were found to be genuine :—

Ice cream, margarine, lard, cheese, ham and butter.

Dried peas, arrowroot, pickles, pepper, ground almonds, ground ginger, tinned fruits, sultanas, raisins, candied peel, figs, dates, preserves, dried fruit salad and fruit crystals.

Honey, bread, plum pudding, mincemeat, bun loaf, tinned herrings, marmalade, jam, lemon cheese, sugar, tea, coffee, cocoa, mustard mixture, port wine, sherry, beer, potted shrimps, flour, self-raising flour, dripping, potted meat, chopped suet, barley, rice, sweets and chocolates, biscuits, table jelly, custard powder, sponge mixture, crab in jar, prepared barley, blackcurrant jelly, calves jelly, picnic cake, lobster paste, blanc-mange, tinned brisling, sauce, cornflour, ginger beer.

Seidlitz powders, compound liquorice powder, tartaric acid, bicarbonate of soda, borax, boracic powder and ointment, camphorated oil, cream of tartar, glycerine, cascara sagrada, epsom salts, baking powder and tincture of rhubarb.

IV.—Prevalence of, and control over, Infectious Diseases.

The principal points to be noted in the behaviour of infectious diseases during the past year are discussed in the following paragraphs.

Diphtheria has maintained the higher level which has been observed since 1925. The marked decline in Scarlet Fever observed in 1926 has been continued during the whole of 1927, and the 109 cases notified mark a new low level since 1918 when only 62 cases were notified.

Enteric Fever, which, up to 1911, used to be a source of an immense amount of illness and death—there were never less than 100 cases per annum in the 30 years previous to this date—was notified on two occasions only.

The notification of Puerperal Fever has been altered by the inclusion of Puerperal Pyrexia, which may be said to be the same thing in a less degree. There were four of the former and 25 of the latter, as against 12 cases of Puerperal Fever last year.

The notification of Influenzal and Primary Pneumonia are much in excess of the previous year's figure. 1917 was an " influenza " year with the deaths much in excess of the average.

Encephalitis and Poliomyelitis shew increased but small figures. Infective Enteritis, which used to be the cause of deaths of hundreds of children annually, was notified on ten occasions, as against 18 last year.

Chicken Pox shewed a marked decline (319—214) but a smart epidemic appeared at the end of the year.

Measles was prevalent in epidemic form, the height of the epidemic occurring in April.

Notwithstanding the fact that there are several districts in the County in which Small Pox is firmly established, I am able to record another year of freedom from the disease.

As the Committee is aware, an investigation is made as to the source of infection in all cases of infectious and contagious diseases notified by medical practitioners and other persons.

Enquiries are made with regard to the occurrence of illness of suspicious symptoms at school or place of employment, in the home, amongst friends and visitors from other towns, and especially with regard to those who have not received the attention of a doctor. The milk supply is recognised as a possible source of infection and enquiries made accordingly. The probability of infection being conveyed by personal clothing and public library books is excluded by enforcing the disinfection of these articles before being handled by the public.

Although the source of infection is seldom definitely found, the making of these enquiries assists materially in public education and in those instances where the source of infection is reasonably proved, an object lesson is provided to parents and others affected.

At the same time each case is considered on its merits with regard to its treatment and isolation at home or in the infectious diseases hospital.

This is often a difficult duty to perform especially in those cases where a mother has been given to understand that home isolation is possible and the difficulty is increased when the separation of a mother from a fretful and sensitive child is attempted.

In determining those cases which can be isolated at home, attention is given to all points which might affect the public. These are :—

(1) Attention of a medical practitioner.

(2) Isolation of patient in a well-ventilated, lighted and structurally sound bedroom.

(3) Nursing by competent person who is fully aware of her responsibilities.

(4) Absence of susceptible children in the home.

(5) Absence of other persons in the house whose employment carries them into contact with foodstuffs or textile goods.

(6) Satisfactory standard of sanitation of house.

This standard is often achieved. On the other hand, the relatives sometimes expect the Department to accept isolation of the patient in an ill-ventilated, dark, dirty and damp bedroom.

The home nursing of infectious diseases is generally performed by the mother and the risk of further spread of the disease is apparent should there be susceptible children in the home.

Although the carrying on of certain classes of homework on infected premises is prohibited by law, no such powers exist for the prohibiting of employment of persons from infected houses amongst commodities capable of being infected and a danger to public health.

Persons employed in the police and postal service are subject to special conditions.

During the period of convalescence there is usually a marked improvement in the standard of cleanliness of an infected house.

Tabular statements shewing the age and ward incidence follow and special points arising out of each particular disease are dealt with below.

TABLE IVA.

Summary of Zymotic Deaths for 1927 and the preceding ten years.

YEAR	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	Average for 10 years 1917—1926.
Population	127100	124200	122900	123100	121700	120900	119900	121950	117277	105845	106747	118451.9
No. of Deaths. Enteric ...	1	...	1	1	3	2	1	1	2	4	2	1.8
Smail Pox ...	...	...	...	. .	...	...	...	...	...	...	...	...
Measles ...	43	...	18	21	6	64	...	14	26	2	35	22.9
Scarlet Fever	...	1	9	2	4	2	3	2	2	...	...	2.5
Whooping Cough	18	1	39	4	22	4	29	10	5	35	28	19.5
Diphtheria ...	11	8	18	6	10	9	13	13	19	13	24	14.4
Diarrhoea ...	17	30	28	25	30	27	70	30	43	42	50	34.5
Totals ...	90	40	113	59	75	108	116	70	97	96	139	91.3
Zymotic Rate	0.71	0.32	0.92	0.47	0.61	0·89	0.95	0.57	0.82	0.90	1.30	0.775

TABLE IVB.—Cases of Infectious Disease for the Year 1927 classified according to age and sex.

Notifiable Disease.	Under 1 year		1—2		2—3		3—4		4—5		5—10		10—15		15—20		20—25		25—45		45—65		65 and over		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Diphtheria	1	3	7	5	4	4	9	8	10	8	46	53	18	24	2	4	2	6	4	5	...	...	...	...	103	120
Erysipelas	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	2	4	4	11	15	...	2	16	24
Scarlet Fever	...	...	2	1	3	5	4	7	9	7	22	22	8	8	1	7	...	1	1	1	...	...	...	...	50	59
Enteric Fever	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	...	...	...	...	4
Pyrexia (Puerperal)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	...	19	...	...	...	...	...	25
Ophthalmia Neonatorum	7	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	9
Pulmonary Tuberculosis	...	...	...	...	...	1	...	...	...	1	14	6	2	3	11	11	8	14	27	34	21	6	1	...	84	76
Other Forms of Tuberculosis	...	1	3	1	2	...	1	...	3	3	7	5	4	5	5	6	...	4	3	8	...	...	...	...	28	33
Influenzal Pneumonia	...	...	...	...	1	...	...	1	...	...	2	...	2	...	1	2	1	...	5	1	7	2	4	5	23	11
Primary Pneumonia	2	2	4	6	2	1	2	2	2	1	7	13	...	6	7	3	3	1	19	7	13	6	3	6	64	54
Malaria	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro Spinal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	...	1	...	1	...	1	1	...	...	1	...	1	...	...	1	...	1	...	...	5	3
Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Infective Enteritis	3	...	2	2	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	3
Chicken Pox	2	7	6	6	5	5	13	11	14	12	54	68	3	8	...	...	...	...	...	...	...	...	...	...	97	117
Measles	81	78	138	137	196	192	267	242	332	306	640	649	24	29	8	4	10	2	3	5	...	1	...	...	1699	1645
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough (not notifiable)	4	5	3	5	3	5	8	7	7	21	33	47	...	2	...	...	...	...	...	...	...	...	...	...	58	92

TABLE IVc.

Cases of Infectious Diseases notified in 1927 and classified according to Ward distribution.

Notifiable Disease.	Total	St. John's.	Avenham.	Christ Church	Ashton.	Maudland.	St. Peter's.	Moorbrook.	Park.	Trinity.	Deepdale.	Ribbleton.	Fishwick.
Diphtheria	223	26	6	7	22	14	14	9	15	14	22	58	16
Erysipelas	40	5	3	6	3	4	4	1	3	2	4	2	3
Scarlet Fever	109	15	1	4	6	6	7	10	18	8	25	8	1
Enteric Fever	2	1	...	...	...	...	...	...	...	...	...	...	1
Puerperal Fever	4	1	...	1	...	...	...	...	1	...	...	1	...
Pyrexia (Puerperal)	25	1	...	2	2	...	3	3	6	2	5	1	...
Ophthalmia Neonatorum	16	3	1	1	...	1	2	...	2	1	1	2	2
Pulmonary Tuberculosis	160	25	7	12	11	11	16	5	24	17	19	9	4
Other Forms of Tuberculosis	61	2	1	7	1	4	13	2	6	11	3	7	4
Influenzal Pneumonia	34	3	2	1	2	3	4	1	7	4	3	2	2
Primary Pneumonia	118	17	11	11	6	8	11	7	8	10	7	17	5
Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro Spinal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	8	...	1	...	...	1	1	1	...	...	3	1	...
Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Infective Enteritis	10	3	...	5	...	1	...	...	...	...	...	1	...
Chicken Pox	214	36	8	3	6	10	19	10	34	18	19	25	26
Measles	3344	373	109	228	282	259	350	149	371	249	412	381	181
Small Pox	...	..	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough (not notifiable)	150	8	6	19	8	12	18	12	27	15	15	3	7

TABLE IVd.

Cases of Infectious Diseases notified in 1927 and classified according to month of occurrence.

Notifiable Disease.	Total	January	February	March	April	May	June	July	August	September	October	November	December
Diphtheria	223	6	7	21	9	17	12	11	14	40	26	36	24
Erysipelas	40	2	2	5	2	1	4	...	2	6	2	7	7
Scarlet Fever	109	4	4	3	6	4	17	9	11	11	13	9	18
Enteric Fever	2	...	...	1	...	...	...	...	...	...	...	...	1
Puerperal Fever	4	...	...	...	...	...	...	...	1	...	1	1	1
Pyrexia (Puerperal)	25	2	3	1	4	...	1	...	2	2	6	3	1
Ophthalmia Neonatorum	16	...	3	3	2	...	4	1	2	...	1	...	...
Pulmonary Tuberculosis	160	13	13	19	16	20	13	8	12	15	14	7	10
Other Forms of Tuberculosis	61	4	4	13	7	5	7	1	7	4	2	2	5
Influenzal Pneumonia	34	3	20	4	2	...	...	...	...	...	2	2	1
Primary Pneumonia	118	12	25	13	8	15	4	11	4	2	7	8	9
Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro Spinal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	8	1	2	...	1	...	...	1	...	...	1	...	2
Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Infective Enteritis	10	...	...	...	1	...	1	5	2	1	...	...	...
Chicken Pox	214	6	6	5	4	5	19	21	10	21	34	59	24
Measles	3344	48	176	813	1260	859	145	17	3	5	9	4	5
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough (not notifiable)...	150	54	47	39	4	3	2	...	...	...	1	...	...

DIPHTHERIA.

	1927	1926	1925	1924	1923
No. of cases notified	223	215	237	131	144
No. of deaths	11	8	18	6	10
Case incidence per 1,000 population	1.75	1.73	1.93	1.14	1.183
Mortality per 1,000 population ...	0.087	0.064	0.014	0.05	0.08
Morbidity per cent. of cases notified	4.93	3.72	7.59	4.58	7.0

The comparatively high incidence of Diphtheria noted in 1925 and 1926 continues. There were actually 13 deaths, all of which took place in the Isolation Hospital. Two of the deaths were allocated to other districts. The disease was most prevalent in the autumn months September—December. The bulk of the cases arose in children of school age, although all the fatalities but one occurred in children not yet attending school. 88.8 per cent. of the cases were removed to hospital, which is comparable with the percentages in the last four years. More than half the cases occurred in the last four months of the year. Ribbleton Ward with 58 cases had twice as high an incidence as the next heaviest infected ward (St. John's 26).

The free supply of Diphtheria antitoxin to medical practitioners was continued from the Public Health Office. Emergency supplies were also available at depots established at other points. Including the amounts used for patients at the Royal Infirmary and the Isolation Hospital, the amounts issued are as follows :—

	Size of dose.		
	2000 units	4000 units	8000 units
Health Office, Tithebarn Street ...	2	69	64
Preston Royal Infirmary ...	...	36	...
Central Police Station	...	24	...
Strand Road Police Station ...	...	12	...
New Hall Lane Police Station ...	...	36	...
Isolation Hospital	10	84	72
Total doses	12	261	136

SCARLET FEVER.

	1927	1926	1925	1924	1923
No. of cases notified	109	124	330	219	223
No. of deaths	...	1	9	2	4
Case incidence per 1000 population...	0.80	1.00	2.68	1.77	1.83
Mortality per 1,000 population ...	...	0.008	0.073	0.016	0.032
Morbidity per cent. of cases notified	...	0.81	2.73	0.9	1.8

The bulk of the persons affected were children of school age under ten years. The cases were spread out over the whole year with a marked increase from June—October. Deepdale with 25 cases had nearly twice as many cases as the next heaviest infected ward (St. John's 15).

Seventy-eight per cent. of the cases were removed to hospital, compared with 80, 81, 86 and 84 in preceding years. The enquiries made revealed some rather interesting points.

(1) The occurrence of a case of Scarlet Fever in a boy engaged as a milk kitter. He was probably infected by a child of a customer with whom he inadvertently made contact.

Although he continued his work after two or three days' illness for three weeks no cases arose among his customers.

(2) The occurrence of two secondary cases in one household where the original case was nursed at home. The intervals between the cases were nine and 58 days respectively. The third case was removed to hospital.

(3) The occurrence of a secondary case in a household seven days after removal of the first to hospital and in another household of one three days after removal of the first to hospital.

(4) The discovery of an unrecognised case of Scarlet Fever in a confectioner's shop without ascertainable ill-consequence to the public.

ENTERIC FEVER.

	1927	1926	1925	1924	1923
No. of cases notified	2	8	3	18	16
No. of deaths	1	...	1	1	3
Case incidence per 1,000 population	0.016	0.064	0.024	0.14	0.13
Mortality per 1,000 population ...	0.008	...	0.008	0.008	0.02
Morbidity per cent. of cases notified	50	...	33.3	5.5	18.75

Of the two cases, one occurred early in the year in a child, and late in the year an elderly woman was certified to have died of the disease in the Royal Infirmary. The source of illness was not ascertained in either case.

INFLUENZA.

There was a smart epidemic of Influenza which began in the last week in January and ceased abruptly towards the end of February. The disease was widespread and affected all ages. A reference to the mortality tables shows that 102 deaths occurred, the bulk of them in the early part of the year.

Influenzal and Primary Pneumonia, both of which are notifiable, were much increased at this time. The universal infection of the population is seen in the fact that certificates were issued to the effect that the attendance had sunk to 60 per cent. and below on account of illness were given to five schools for the week ending January 28th, 12 schools for the week ending February 7th, six schools for the week ending February 11th and two for the week ending February 18th.

The strain on the Health Visitors became so great that additional assistance was engaged for the special purpose of paying advisory visits to cases. During the three weeks that the special nurse was employed, 369 visits were made. These visits put the department in possession of valuable information and allowed them to provide, where necessary, nursing, medical and other assistance.

The great part played by Influenza in our Vital Statistics may be illustrated by the following summary, in which deaths due to Bronchitis and Pneumonia are also included :—

	No. of deaths caused by		
	Influenza	Bronchitis	Pneumonia
1916	37	150	173
1917	31	160	176
1918	391	151	210
1919	166	183	168
1920	37	154	153
1921	32	118	139
1922	85	151	151
1923	54	161	189
1924	89	160	175
1925	59	143	175
Average	98.1	153.1	170.9
1926	37	95	131
1927	102	131	174

Puerperal Pyrexia and Puerperal Fever and Opthalmia Neonatorum are dealt with in the Maternity and Child Welfare Section.

MEASLES.

A severe epidemic of Measles began in the early part of the year and continued until June when it abruptly came to an end. The number notified, 3,344, was the largest since notification came into force in 1923. At the height of the epidemic the number of cases arising at one time was so great that very little could be done in the way of ensuring that the child was under satisfactory conditions. A large number of cases found by the Health Visitors were already convalescent. In the majority of cases the Health Visitors were able to assist and advise the mothers to the advantage of the children.

Sixty-six, or 1.9 per cent. of the total were removed to hospital. Nurses were provided for daily attendance in the homes, where necessary, and everything done that could be done to ensure a safe outcome.

The epidemic affected the whole town, the wards bearing the greatest number of cases were Deepdale 412, Ribbleton 381 and St. John's 373.

Forty-three deaths, nearly all of which occurred in young children under five years of age, were certified. This is the largest number of deaths for the disease since 1922 (65 deaths).

The chief adverse factors are, as I have frequently pointed out before, failure to realise the fatal possibilities of the disease until secondary complication, particularly Broncho Pneumonia has set in. This casual attitude, influenced no doubt by the extreme infectivity of the disease, not only allows the disease to spread from one child to another in a household but explains the undiminished inter-house traffic which is still maintained between infected and non-infected households. It also explains the unreadiness to send for medical aid or to accept hospital isolation until serious symptoms have declared themselves. I have, however, gathered a general impression that the lack of knowledge is not so widespread as it was in the previous epidemics and that the teaching in the homes and at the infant welfare centres is bearing some little fruit.

SMALL POX.

There were no cases reported during the year. The disease which, as previously reported, has become endemic in the North-East and North Midlands, caused several limited outbreaks in the neighbourhood of the Borough, i.e., Fleetwood, Chorley, Blackburn, Fulwood, Tardy Gate and Penwortham.

On 16 occasions we ascertained that persons arriving in Preston had been exposed to infection by Small Pox. On four of these occasions the suspected persons arrived on ships engaged in the coastal trade. There were 50 such contacts, of whom only 26 were discovered. To give an idea as to the volume of work and the anxiety experienced in connection with Small Pox it will suffice to say that these contacts involved 371 visits to common lodging houses and 524 to vans.

The difficulties of the work are illustrated by the following history of a case as reported to me by my colleague in the Preston Rural District, Colonel Trimble.

Patient W.W., aged 62 years.

" Had been living at ' Mac's ' Lodging House, 19 High Street, Preston. Wandering from ' Mac's ' to ' Spark's ' in Fylde Road, another lodging house. Was doing this for the past six months—never left Preston until July 12th. On 12th July, left Preston and went to Kirkham and stopped at the Kirkham casual ward for two nights (12th and 13th July). Then went to Poulton and slept for three nights, 14th, 15th and 16th July, at a lodging house behind the churchyard. Then went to Lancaster and arrived at Heysham on the 17th July. From 17th to 27th July he has been wandering between Lancaster, Heysham, and the Fylde district, sleeping out each night. On the 27th he slept in the casual ward, Fulwood. The rash came out on the 22nd July. He began to feel ill between Lancaster and Heysham on the 19th July. Rash became vesicular on the 23rd and pustular on the 28th. Presumably, the patient came in contact with the infection about the 7th of July, when he was still in Preston."

On this report the Sanitary Inspector for the District reported to me as follows :—

" I beg to report that I have visited ' Mac's ' Common Lodging House, High Street, on July 30th. I interviewed the Keeper who informed me that he does not know the patient W.W.

I examined the Keeper's register of lodgers in which the first entry is dated July 4th, the previous register having been destroyed. There is no entry of W.W.'s name.

I then proceeded to Spark's Common Lodging House, Water Lane, kept by J. Taylor, who produced the register of lodgers ; I found from the entries that a W.W., hailing from Preston, was entered on June 4th, but I cannot obtain the date of his leaving and the keepers do not know anything about him."

Repeated interviews with W.W. at the Small Pox Hospital failed to add anything or to correct the above story of his movements.

The great difficulty with the importation of Small Pox is that it is conveyed by members of the tramp class who have no fixed name and no fixed address, and having no public conscience, present the difficulties outlined above.

On numerous occasions I have been asked by medical practitioners to see cases which might conceivably be Small Pox and I should like to acknowledge the very great assistance which Dr. Butterworth, the County Medical Officer of Health, has rendered me in providing the services of his experienced Assistant Medical Officers in difficult cases.

WHOOPING COUGH.

This disease is not notifiable and the numbers which came to the notice of the department were ascertained as a result of the notifications of the Head Teachers of the Elementary Schools. Of the 150 cases, practically all occurred in January, February and March. Over one-half were between five and ten years of age. Among the 18 deaths, all but one were under five years of age. The difficulties mentioned as to control of Measles apply to Whooping Cough with equal force, with the added disadvantage that there is a gradual onset, no warning rash and therefore a prolonged period of infectivity before any steps can be taken to prevent the spread of infection. Both Measles and Whooping Cough are responsible for a great deal of suffering and early death, and predispose those sufferers who recover from the actual attack to many other health destroying diseases.

Isolation Hospital.

The Hospital is a modern institution, consisting of an administration block four ward blocks, laundry, and other necessary premises.

The ward blocks contain two main wards and two side wards each. The accommodation is for 60 beds.

During the year 465 cases were admitted, compared with 360 in 1926, 510 in 1925, and 374 in 1924.

In addition to Enteric Fever, Scarlet Fever and Diphtheria, a large number of cases of other illnesses were treated.

Cost.—The following figures are taken from the Borough Treasurer's Abstracts and Annual Reports :—

	Expenditure			Income		
	£	s.	d.	£	s.	d.
1923–24	6974	16	0	94	11	2
1924–25	7424	4	1	323	2	2
1925–26	8602	0	9	183	17	5
1926–27	8374	0	0	577	0	0

ENTERIC FEVER.

One case of Paratyphoid was admitted as compared with six cases in the previous year.

SCARLET FEVER.

The decline in the prevalence of this disease is shewn in the small number of admissions, viz., 85 as compared with 98 in 1926, 266 in 1925, and 188 in 1924. All were mild cases and recovered. There was one return case. A child was discharged, after 100 days in hospital, on September 17th. He had a discharging ear. His sister was admitted on September 23rd with a moderately severe attack which caused several complications. She was discharged after 15 weeks' stay in hospital ; the average length of stay being 37 days.

DIPHTHERIA.

198 cases were admitted compared with 177 and 198 in the previous years. There were 13 deaths as compared with 6 and 16 in previous years. There was an excessive number admitted with laryngeal obstruction of whom 14 required operative treatment, with 9 deaths. The figures for previous years were 5 (2 deaths) and 7 (2 deaths). In many instances the actual disease was found on admission to be so slight as to present no signs, clinical or bacteriological (23), and in 26 instances follicular tonsillitis, a non-diphtheritic inflammatory disease of the tonsils, was the actual cause of disease.

MEASLES.

Sixty-six cases were admitted, compared with 4 in 1926, 13 in 1925, and 31 in 1924. There were 3 deaths, compared with 0, 2 and 4 in corresponding years. Four cases admitted to the Preston Royal Infirmary suffering from fractures (1), burns (1), eye disease (2), were transferred to the Isolation Hospital on becoming infected by measles.

ERYSIPELAS.

Seventeen cases were admitted, of whom 3 died. One case suffering from malignant disease of the scalp was transferred to the Poor Law Institution.

PNEUMONIA.

Of the two cases remaining in hospital at the beginning of the year, and the 16 cases which were admitted, five died. Thirteen patients were children.

PUERPERAL FEVER.

Eleven women were admitted, compared with 11, 5 and 5 in the three previous years. There was 1 death, the comparative figures being 1, 3 and 3 for corresponding years. With one exception, the fatal case, the septic condition was local and amenable to treatment. The treatment of this class of case imposes a very great strain and anxiety upon the medical and nursing staff. It is felt that the results this year have been astonishingly good.

ENCEPHALITIS LETHARGICA.

Five cases were admitted. In 2 of these the diagnosis, after a period of observation and tests, was found to be melancholia and tuberculosis meningitis respectively. The other 3 were young members of one family, and found to be suffering from marasmus (2) and teething respectively.

OTHER DISEASES.

Sixty-six children were admitted, compared with 48 in 1926, 9 in 1925, and 8 in 1924. With one exception the cases were young children, and mostly were infants of tender years.

The cases comprised :

Marasmus ...	46	Ophthalmia Neonatorum	6
Rickets	7	Nephritis	1
Dermatitis ...	1	Meningitis	2
Debility	1	Diarrhœa	1
Chicken Pox ...	1		

The special feature this year has been the successful treatment of Ophthalmia Neonatorum. This disease is usually one of great severity and demands incessant care. The scheme of treatment involving hourly attention throughout the day is one advised by Dr. Sykes, of the Preston Royal Infirmary. All our cases were discharged with good vision in both eyes.

TABLE IVe.

Disease for which admitted.	In Hospital Dec. 31, 1926	Admitted		Dis-charged	Death	Remaining Dec. 31, 1927
		No.	Per cent of Cases Notified			
Enteric Fever	...	1	50	1	...	...
Scarlet Fever...	7	85	78	76	...	16
Diphtheria......	6	198	88·8	173	13	18
Measles	...	66	1·9	63	3	...
Erysipelas	...	17	42·5	14	3	...
Pneumonia ...	2	16	10·6	12	5	1
Puerperal Fever	...	11	42·3	10	1	...
Encephalitis Lethargica...	...	5	62·5	3	...	2
Other Diseases	4	66	...	51	14	5
TOTALS	19	465	...	403	39	42

TABLE IVf.

Length of stay in Hospital of Patients who died or were discharged in 1927 whether admitted in that year or previously.

Disease for which admitted.	No. of Cases Died or Discharged during 1927	Total Days in Hospital	Average length of stay in days	Corresponding Figures for :			
				1926	1925	1924	1923
Enteric Fever	1	17	17	25·33	18·00	19·33	20·00
Scarlet Fever	76	2816	37·05	34·45	33·15	34·60	32·66
Diphtheria	186	3157	16·97	23·50	21·67	25·89	23·00
Measles	66	1299	19·68	13·00	15·38	18·73	40·50
Erysipelas	17	203	11·94	16·33	8·16	17·50	7·50
Pneumonia	17	576	33·29	22·60	27·00	22·50	13·50
Puerperal Fever	11	209	19·00	21·72	8·14	10·40	4·00
Encephalitis Lethargica	3	128	42·00	8·00	14·00	26·70	15·00
Other Diseases...........	65	2244	34·52	22·02	17·13	32·61	...
Total	442	11328	25·62	26·25	27·22	29·70	27·63

TABLE IVg.

Disease for which Admitted.	Total Days in Hospital in 1927	Average Beds occupied daily	Corresponding Figures for : 1926	1925	1924	1923
Enteric Fever	17	0·04	0·41	0·19	0·63	0·81
Scarlet Fever	2884	7·90	10·00	24·40	17·77	17·27
Diphtheria	4226	11·59	11·40	12·73	7·62	7·32
Measles	1299	3·56	0·14	1·03	2·99	0·99
Erysipelas	203	0·55	0·13			
Pneumonia	583	1·58	0·63			
Puerperal Fever	209	0·57	0·65			
Encephalitis Lethargica	130	0·35	0·02			
Other Diseases	2035	5·57	2·90			
Totals	11586	31·74	26·30	38·93	29·01	26·40

TABLE IVh.

Ultimate diagnosis of cases admitted in 1927.

Disease for which admitted.	Total Admitted	Original Diagnosis confirmed	Actual Disease found. Scar. Fever & Diphtheria	Measles	Diphth. and Wh. Cough.	No evidence of disease	Scarlet Fever	Follicular Tonsillitis	Enteric Fever	Pneumonia	Rheumatic Fever	Tuberculosis Meningitis	Measles and Scar. Fever	Whooping Cough	Measles and Diphtheria	Cancer of Scalp	Measles and Wh. Cough	Puerperal Mania	Melancholia	Teething	Marasmus
Enteric Fever	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	85	83	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	198	133	2	1	1	23	8	26	1	1	1	1	...	...	...	...	...	...	...	...	...
Measles	66	63	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...
Erysipelas	17	16	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Pneumonia	16	14	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Puerperal Fever	11	9	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Encephalitis Lethar.	5	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	2	1
Other Diseases	66	66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	465	385	3	3	1	23	8	26	1	1	2	2	1	1	1	1	1	1	1	2	1

TUBERCULOSIS.

By Dr. JAMES WALKER, M.B., Ch.B., D.P.H.

(1) INCIDENCE OF THE DISEASE.

In the year under review the total number of cases of Tuberculosis (all forms) notified in Preston was 221. This shews a decrease in the number of cases as compared with the previous year, when 237 notifications were received.

The above figure gives a notification rate of 1·74 per 1,000 of the population. Of this rate the pulmonary form of the disease is responsible for 1·26, and the non-pulmonary form for ·48 per 1,000.

The following table shows the number of notifications received in Preston during the last ten years.

TABLE IVi.

Year	Notifications.—Preston.		
	Pulmonary	Non-Pulmonary	Total
1918	238	22	260
1919	281	25	306
1920	246	60	306
1921	166	52	218
1922	191	46	237
1923	163	45	208
1924	184	48	232
1925	135	58	193
1926	196	41	237
1927	160	61	221

The following three tables deal with the age and sex distribution of the notified cases (primary notifications on Form A), the relative incidence in the different Wards of the Borough and the occupations of the notified cases.

TABLE IVj.

Summary of Notifications during the Year 1927.

	Notifications on Form A.											
Age periods	0–1	1–5	5–10	10–15	15–20	20–25	25–35	35–45	45–55	55–65	65–	Total
Pulmonary Males	...	...	14	2	11	8	11	16	9	12	1	84
„ Females	...	2	6	3	11	14	22	12	5	1	...	76
Non-Pulmonary Males	...	9	7	4	5	...	3	...	...	...	...	28
„ Females	1	4	5	5	6	4	6	2	...	...	...	33

TABLE IVk.

Ward Incidence of Tuberculosis.

WARD	Number of Notified Cases.			Incidence Rate per 1000 of the population.
	Males	Females	Total	
Avenham	5	3	8	1.05
Trinity	17	11	28	2.70
Deepdale	12	10	22	1.82
Fishwick	3	5	8	1.00
St. Peter's	12	17	29	2.35
Ashton	5	7	12	1.25
St. John's	14	13	27	2.16
Moor Brook	4	3	7	0.74
Park	11	19	30	1.93
Maudland	10	5	15	1.45
Christ Church	9	10	19	2.09
Ribbleton	10	6	16	1.57
TOTALS	112	109	221	1.74

TABLE IVl.

Occupations of Notified Cases.

Description	Number
Under School Age	16
School Children	45
Cotton Mill Operatives	67
Domestic Duties	19
Labourers	12
Clerks	5
Shopkeepers and Assistants	7
Engineers and Mechanics	4
Iron Workers	5
Electrical Workers	2
Other Occupations	34
No Occupation	5
Total	221

(2) DEATHS.

During 1927 the number of deaths registered in Preston as due to Tuberculosis (all forms) was 123, showing a decrease from the previous year, when 140 deaths were registered. The ratio of the non-notified deaths to the total deaths is as one to four.

Of the total deaths from Tuberculosis, 100 were due to the pulmonary form of the disease, and 23 were caused by other forms. The death rate from the disease (all forms) was 0·97 per 1,000 of the population, against 1·12 for 1926. The pulmonary form was responsible for a death rate of 0·79 per 1,000, while other forms of the disease caused a rate of 0·18 per 1,000.

It is worthy of note that not only are the above the lowest recorded figures for the Tuberculosis mortality, but it is also the first year in which the death rate from this disease has been below 1 per 1,000 of the population.

The age and sex distribution of these deaths is shewn in the following table.

TABLE IVm.

Cause of Death.	Sex	All Ages	0—1	1—2	2-5	5-15	15-25	25-45	45-65	65-75	75 and over
Pulmonary Tuberculosis ..	M	56	2	1	...	...	9	24	17	3	...
	F	44	...	...	3	3	19	14	5	...	...
Other Tuberculous Diseases...	M	10	...	4	...	2	2	..	2	...	...
	F	13	1	1	...	3	2	4	2	...	...

(3) PROGRESS OF CORPORATION'S SCHEME.

During the year under review there has been no important development in connection with the Dispensary Organisation. The work has been carried out on the same lines as in the previous year, and all the machinery, which is, we believe, a contribution to the gradual elimination of the disease, has continued to function normally. The evidence of this is the slow but surely progressive fall in the incidence and mortality of the disease which is taking place everywhere.

This satisfactory decrease in such a universal scourge as Tuberculosis is, however, not likely to be greatly accelerated until further improvement is made in the conditions under which a large proportion of the population is compelled to live.

In the last report reference was made to the completion and opening of the new " Chestnuts " Sanatorium during 1926. By the end of 1927 this institution had been open for a full year, and a better idea could be formed of its position in the Corporation's scheme. It need only be said that the institution continues to fulfil expectations and has assumed a larger degree of usefulness in the Scheme than was possible previously.

During the year 77 patients were admitted to this institution and received treatment there. Any attempt to analyse the results of such treatment, however, would be misleading, as it must be remembered that one of the primary objects of this institution is the segregation of highly infectious cases rather than the curative treatment of early cases. The figures showing the immediate results of treatment are, however, included in Table IVN., which deals with all the institutions collectively to which patients are sent.

(4) WORK DONE DURING THE YEAR.

The following is a summary of the work carried out during the year under the Dispensary Organisation :

(*a*) AT THE DISPENSARY.

During the year 435 new patients were examined by the Tuberculosis Officer, either at the Dispensary or at their own homes.

Old patients made 1962 attendances at the Dispensary for treatment, reports, or observation purposes.

Of the new patients 195 were diagnosed as suffering definitely from Tuberculosis in some form or other, 144 from pulmonary and 51 from non-pulmonary Tuberculosis.

The pulmonary cases were classified as follows :—

T.B. —	99
T.B. + Group 1	12
T.B. + Group 2	26
T.B. + Group 3	7

The non-pulmonary cases were classified as follows :—

Bones and Joints	19
Abdominal	12
Peripheral Glands...	20
Other Organs	0
	51

The following table shows in more detail the work done at the Dispensary during the year.

TABLE IVn.

Return showing the work at the Dispensary during the Year 1927.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY				TOTAL.			
	Adults		Children		Adults		Children		Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—NEW CASES examined during the year (excluding contacts):												
(*a*) Definitely tuberculous	51	54	12	7	6	12	14	11	57	66	26	18
(*b*) Doubtfully tuberculous	21	29	14	7	2	2	2	1	23	31	16	8
(*c*) Non-tuberculous	40	43	23	16	1	2	1	1	41	45	24	17
B.—CONTACTS examined during the year:												
(*a*) Definitely tuberculous	2	0	2	2	...	...	...	2	2	...	2	4
(*b*) Doubtfully tuberculous	...	2	4	5	...	...	...	...	...	2	4	5
(*c*) Non-tuberculous	2	8	19	14	...	...	1	...	2	8	20	14
C.—CASES written off the Dispensary Register as:												
(*a*) Cured	9	6	5	8	...	...	10	8	9	6	15	16
(*b*) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error) ...	55	74	58	38	2	3	2	1	57	77	60	39
D.—NUMBER OF PERSONS on Dispensary Register on December 31st:												
(*a*) Diagnosis completed	187	163	49	62	16	23	37	40	203	186	86	102
(*b*) Diagnosis not completed	3	3	...	3	...	...	...	...	3	3	...	3

TABLE IVn—(Continued).

Return showing the work at the Dispensary during the Year 1927.

1. Number of persons on Dispensary Register on January 1st	605
2. Number of patients transferred from other areas and of "lost sight of" cases returned	15
3. Number of patients transferred to other areas and cases "lost sight of"	109
4. Died during the year	81
5. Number of observation cases under A (*b*) and B (*b*) above in which period of observation exceeded 2 months	7
6. Number of attendances at the Dispensary (including Contacts) ...	2397
7. Number of attendances of non-pulmonary cases at Orthopædic Out-stations for treatment or supervision	...
8. Number of attendances, at General Hospitals or other Institutions approved for the purpose, of patients for (*a*) "Light" treatment ... ... (*b*) Other special forms of treatment	 ... ...
9. Number of patients to whom Dental Treatment was given, at or in connection with the Dispensary ...	8
10. Number of consultations with medical practitioners :— (*a*) At Homes of Applicants ... (*b*) Otherwise	 8 257
11. Number of other visits by Tuberculosis Officers to Homes	30
12. Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes	3280
13. Number of (*a*) Specimens of sputum, &c., examined ... ... (*b*) X-ray Examinations made in connection with Dispensary work	 445 112
14. Number of Insured Persons on Dispensary Register on the 31st December	261
15. Number of Insured Persons under Domiciliary Treatment on the 31st December	103
16. Number of reports received during the year in respect of Insured Persons :— (*a*) Form G.P. 17 ... ... (*b*) Form G.P. 36	 64 121

(*b*) WORK OF THE TUBERCULOSIS NURSES.

The nurses (two in number) have made 211 visits to the homes of new patients and 3,069 re-visits to those of old patients.

The following table compiled from the nurses' house reports deals with the number of persons in infected houses. The figures above the heavy line show the number of families where there were more than two persons per room—they number 17 families, consisting of 124 persons.

TABLE IVo.

No. of Rooms in Infected Houses.	Number of Persons.												TOTAL.	
	1	2	3	4	5	6	7	8	9	10	11	12		
	Number of Families.												Houses	Occupan
1 Room ...	...	1	3	1	...	1	...	...	...	...	...	...	6	21
2 Rooms ...	...	...	3	...	...	...	...	...	...	...	...	...	3	9
3 Rooms ...	...	3	13	23	13	12	2	5	1	...	...	...	72	337
4 Rooms ...	..	4	7	12	12	9	1	1	1	1	1	...	49	236
5 Rooms ...	...	5	11	13	13	6	4	9	1	2	...	1	65	337
6 Rooms ...	...	1	...	1	2	2	...	3	...	...	...	...	9	52
7 and over ...	...	...	...	1	1	...	...	...	...	...	...	...	2	9
Families ...	...	14	37	51	41	30	7	18	3	3	1	1	206	...
Persons ...	...	28	111	204	205	180	49	144	27	30	11	12	...	1001

(*c*) RESIDENTIAL TREATMENT.

The average number of beds available to the Corporation during 1927 for the treatment of all forms of Tuberculosis, the extent of residential treatment, and the immediate results of such treatment, are shown in the following tables :

TABLE IVP.

Average number of beds available for patients during the year 1927.

	Pulmonary Tuberculosis		Non-Pulmonary Tuberculosis	Total
	Sanatorium Beds	Hospital Beds "Chestnuts"		
Adult Males	9	13	2	24
Adult Females	8	15	2	25
Children under 15	12	2	6	20
Total	29	30	10	69

TABLE IVQ.

Extent of Residential Treatment during 1927.

			In Institutions on Jan. 1	Admitted during the Year	Discharged during the Year	Died in the Institutions	In Institutions on Dec. 31
Number of Patients	Adults	M.	20	60	51	8	21
		F.	22	63	57	9	19
	Children	M.	6	22	21	0	7
		F.	8	28	27	2	7
TOTALS ...			56	173	156	19	54

TABLE IV R.

Return showing the immediate results of treatment of patients discharged from Residential Institutions during the Year 1927

	Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												Total.
			Under 3 months			3—6 months			6—12 months			More than 12 months			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis.	Class T.B. minus.	Quiescent	2	2	4	6	12	14	4	.	7	.	.	.	51
		Improved	1	5	.	3	3	3	2	1	.	.	.	.	18
		No material improvement	3	6	1	.	.	.	.	.	.	.	.	.	10
		Died in Institution ...	2	1	.	.	.	.	.	.	.	.	.	.	3
	Class T.B. plus Group 1.	Quiescent	.	.	.	2	.	.	.	.	.	.	.	.	2
		Improved	3	.	.	6	3	.	.	1	.	.	.	.	13
		No material improvement	.	1	.	1	.	.	.	.	.	.	.	.	2
		Died in Institution ...	.	.	.	.	.	.	.	.	.	.	1	.	1
	Class T.B. plus Group 2.	Quiescent	.	.	.	.	.	.	.	1	.	.	.	.	1
		Improved	.	1	.	3	.	.	1	.	.	.	1	.	6
		No material improvement	4	9	.	2	1	.	2	1	.	.	1	.	20
		Died in Institution ...	3	2	.	1	.	.	.	.	.	.	1	.	7
	Class T.B. plus Group 3.	Quiescent	.	.	.	.	.	.	.	.	.	.	.	.	0
		Improved	.	.	.	.	1	.	.	.	.	.	.	.	1
		No material improvement	1	1	.	.	1	.	.	.	.	.	.	.	3
		Died in Institution ...	2	4	1	.	.	.	.	.	.	.	.	.	7
Non-Pulmonary Tuberculosis.	Bones and Joints.	Quiescent or Arrested ...	.	.	.	.	.	.	1	.	.	.	.	1	2
		Improved	.	2	2	1	.	1	.	.	.	.	.	1	7
		No material improvement	.	.	2	.	.	.	.	.	.	1	.	.	3
		Died in Institution ...	.	.	.	.	.	1	.	.	.	.	.	.	1
	Abdominal.	Quiescent or Arrested ...	.	.	2	.	.	.	.	.	.	.	.	.	2
		Improved	.	1	1	.	.	.	.	.	.	.	.	1	3
		No material improvement	.	.	.	.	.	.	.	.	.	.	.	.	0
		Died in Institution ...	.	.	.	.	.	.	.	.	.	.	.	.	0
	Other Organs.	Quiescent or Arrested ...	.	.	.	.	.	.	.	.	.	.	.	.	0
		Improved...	.	.	.	.	.	.	.	.	.	.	.	.	0
		No material improvement	.	.	.	.	.	.	.	.	.	.	.	.	0
		Died in Institution ...	.	.	.	.	.	.	.	.	.	.	.	.	0
	Peripheral Glands.	Quiescent or Arrested ...	.	1	4	.	.	2	.	.	.	.	.	.	7
		Improved	1	1	1	.	.	1	.	.	.	.	.	.	4
		No material improvement	1	.	.	.	.	.	.	.	.	.	.	.	1
		Died in Institution ...	.	.	.	.	.	.	.	.	.	.	.	.	0

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

There was no instance in which a tuberculous person was engaged in the Milk Trade.

PUBLIC HEALTH ACT, 1925. SECTION 62.

There was no instance in which the Council applied for an order for compulsory removal to Hospital of a tuberculous person.

WORK DONE IN THE BACTERIOLOGICAL LABORATORY DURING 1927.

The following is the number of specimens examined during the year :—

Specimens of Sputum examined for Tubercle Bacilli ...	443
Throat Swabs examined for Diphtheria Bacilli	1692
Other miscellaneous specimens	14
	2149

In view of the provision just completed at the "Chestnuts" for the vocational training of the patients, it is of great interest to read the report furnished by Mr. Howarth, lately Head Master of St. Mary's Street Wesleyan School, who has interested himself very greatly in the welfare of our patients. The great difficulty in connection with a hospital where patients remain for a considerable length of time, and are unable to fill in their time by work or the ordinary pastimes of the healthy man or woman, is to prevent boredom and mental lassitude which, we find, have an adverse effect upon the physical condition.

With the object in view of providing suitable occupation for our patients, Mr. Howarth undertook the organisation of the Library and the institution of courses of reading and study which have been enjoyed and have proved of decided value both to the patients and the administrative staff. While on the subject, our gratitude must be expressed to those ladies and gentlemen who at considerable sacrifice of time organised the excellent concerts and entertainments during the winter months.

Report on Educational Addresses to Patients.

These visits extended from October 20th, 1927, to March 28th, 1928, with an interval at Christmas of five weeks, one week more than intended on account of sickness.

In all, 19 visits were made. The attendance has been very good, the average number present being 12, the highest number present at any meeting being 16, and the lowest 8. The period before and after Christmas was the most thinly attended owing to the prevalence of influenza among the patients.

The addresses have been followed with considerable interest and generally the attention has been quite keen. There does not appear to be any serious application to private reading. I gather they are not habitual readers even when well, except in two or three cases. But I suspect that under their present state of health they have not the requisite energy for any sustained effort.

Some idea of the matter dealt with may be judged from the subjects of the addresses. These were, China, Wireless, Humour, Map Reading, St. Bernard, The Calendar, Words and Their Uses, Water Supply, India, Rain, Puzzles, Some Catchy Problems, Magna Charta, How to Use a Dictionary, Rhythm, Measuring, The Pied Piper, Christmas and Easter Customs.

The new blackboard and easel came into use on December 7th, and they have been very helpful in illustrating the various talks.

H. HOWARTH.

VENEREAL DISEASES.

The Clinics for the treatment of Venereal Diseases are held at the Preston Royal Infirmary at the times stated below.

The premises were specially built and equipped for the purpose, and are in charge of Dr. W. H. Pimblett, Hon. Physician at the Infirmary. Dr. Pimblett is assisted by one of a rota of medical men at each of the Clinics held for men, and by the Assistant Medical Officer for Maternity and Child Welfare at the Clinic held for women.

The Clinics are held at the following times :—

ARRANGEMENTS AND TIME TABLE.

Clinics—

Tuesday—Females	4-30 to 7-0 p.m.
Wednesday—Males	4-30 to 7-30 p.m.
Friday—Males	4-30 to 7-0 p.m.

Intermediate Treatment for Gonorrhoea—

Females—Tuesday	4-30 to 7-0 p.m.
Females—Friday	2-0 to 3-0 p.m.
Males—Every day (except Sunday)—	
Morning	8-30 to 9-30
Evening	5-0 to 7-0

The two tables appended (IVs. and IVt.) shew the work in detail in the form required by the Ministry of Health. Briefly the work is as summarised here :—

	1925	1926	1927
Total New Cases	508	572	631
Total Attendances at Clinic	13325	13378	17859
,, ,, Males ...	3854	3507	5020
,, ,, Females...	2423	2330	2969
Intermediate Attendances (included in above)—			
Males	6426	6856	9071
Females	622	685	799

TABLE IVs.

RETURN relating to all persons who were treated at the Treatment Centre at Preston Royal Infirmary during the Year ended 31st December, 1927.

	Syphilis		Soft Chancre		Gonorrhœa		Conditions other than Venereal		TOTAL	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of persons who, on the 1st January, 1927, were under treatment or observation for :—	143	167	...	...	111	54	...	...	254	221
2(a). Number of cases dealt with at the Treatment Centre during the year **for the first time**	149	58	...	...	212	32	102	78	463	168
Total—Items 1 and 2(a)	292	225	...	...	323	86	102	78	717	389
2(b). Number of persons included in Item 2(a) known to have received **previous treatment at other Centres** for the same infection	3	1	...	...	4	...	...	...	7	1
3. Number of persons who ceased to attend the out-patient Clinic										
(a) before completing the first course of treatment for	14	11	...	...	...	...	...	...	14	11
(b) after one or more courses but before completion of treatment for	41	18	...	...	...	...	...	...	41	18
(c) after completion of treatment, but before final tests as to cure of	1	...	...	...	...	...	...	...	1	...
4. Number of persons transferred to other Treatment Centres after treatment for	19	4	...	...	...	...	...	...	19	4
5. Number of persons discharged after completion of treatment and observation for	47	27	...	...	119	41	102	78	268	146
6. Number of persons who, on the 1st January, 1927, were under treatment or observation for :—	170	165	...	...	204	45	...	...	374	210
Total—Items 3, 4, 5 and 6	292	225	...	...	323	86	102	78	717	389
7. Out-patient attendances :—										
(a) For individual attention by the Medical Officer ...	3109	1965	...	...	1710	830	201	174	5020	2969
(b) For intermediate treatment, e.g., irrigation, dressings, etc.	...	...	...	...	...	...	...	...	...	...

Total Attendances ... 17,859

8. Aggregate number of " In-patient days " of treatment given to persons who were suffering from :—	...	...	...	...	...	...	...	...	...	...

9. Examination of Pathological material :—	For detection of			For Wassermann Reaction
	Spirochetes	Gonococci	Other Organisms	
(a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre	15	624	Nil.	Nil.
(b) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory	...	...	...	554

TABLE IVT.

Statement showing the services rendered at the Treatment Centre at the Preston Royal Infirmary during the Year classified according to the areas in which the patients resided.

	Preston	County of Lancs.	West-morland	Black-burn	Liverpool	Manches-ter				Total
A. Number of persons from each area dealt with during the year at or in connection with the out-patient Clinic **for the first time** and found to be suffering from :—										
Syphilis	154	49	2	1	1	...	...			207
Soft Chancre	...	...	...	...	...	...	...			...
Gonorrhœa	161	79	2	...	1	1	...			244
Conditions other than venereal	132	48	...	...	...	...	...			180
Total	447	176	4	1	2	1	...			631
B. Total number of attendances at the out-patient Clinic of all patients residing in each area	13685	4043	71	10	22	28	...			17859
C. Aggregate number of "In-patient days" of all patients residing in each area	...	...	...	...	...	...	...			...
1. Out-patient Clinic										
D. Number of doses of arsenobenzol compounds given										
Neokharsivan .6	504	207	...	...	...	...	...			711
.45	751	285	4	...	1	...	...			1041
.75	22	11	...	...	...	...	...			33
Hg.	1289	448	4	...	1	...	...			1742
Other Medicines	995	501	28	9	4	22	...			1659
Bismostab	24cc	14cc	...	...	...	...	...			38cc
2. In-Patient Department to patients residing in each area	...	...	...	...	...	...	..			...

E. Give the names of arsenobenzol compounds used in the treatment of syphilis and the usual initial and final doses	Neo.K.—.35 or .45 to .75 grm. , N.A.B.—.35 or .45 to .75 grm. Stabilarsan .35 to .6 grm. Sulfarsenol .36 to .60 grm. Silver Salvarsan .15 to .30 grm.
F. State the amount and kind of treatment usually administered to a case of Syphilis of each of the types usually dealt with at the Treatment Centre	(I) Primary infection with negative Wasserman :— e.g.,—N.A.B. or Neo.K. and Hg. or Bismostab :—2 courses of 6.30 grms., and 4.2 grms., respectively, of arseno-bensol compound, and 9 grms. of Hg. or 9 injections of .01 grm. of Bismostab. (II) Primary infection with Positive Wasserman :— As in (I) but a short third course of five injections are given. Between each course are given Tabellae of Hyd. C. Crete, gr. 1, and T.D.S., and followed by a course of Potassium Iodide for three weeks before another course is given. (III) Secondary and later cases :— As in (II) but repeating the third course. (IV.) Syphilis of the Nervous System.–Longer courses of smaller doses, preferably employing Bismuth to Hg.
G. State the nature of tests applied in deciding as to discharge of patients referred to in Item 5 on previous page	(1) Primary infection with negative Wasserman.— Two years' observation from commencement of treatment, a Wasserman being taken every three and later, six months. (2) Primary infection with positive Wasserman and secondary cases.—Two years' freedom from all signs of disease after suspension of all medical treatment, a Wasserman being taken every three months. Provocative N.A.B. and Wasserman used as required. Gonorrhoea. (1) Males.—Resume usual habits, food and exercise. Full sized bougies. AgNO 3 grs. V to oz. j. No urethral discharge. Palpation over metal bougies. Microscopic examination of films made from threads and centrifugalised deposits. Palpation and massage of prostate and seminal vesicles and films made of any secretions. (2) Females.—Resume usual habits, food and exercise. AgNO 3 15% to the cervical canal. Palpation urethra, and discharge, if any, examined. Ferguson's speculum—discharge from vagina and cervix examined.

Dr. W. H. Pimblett reports as follows :—

During the year new cases attending at the Clinics for the first time increased by 59 ; Gonorrhoea increased by 69 ; Syphilis decreased by 12 and cases other than Venereal Disease increased by 2. It is, however, when we come to the attendances for treatment that such a favourable advance is seen, viz., an increase of 4,481, of which 3,728 are males and 753 females.

I would like most strongly to advocate the ante-natal treatment of both Gonorrhoea and Syphilis, especially of Syphilis from the point of view of preventing the unnecessary suffering of congenitally-syphilitic children, the unhappiness it causes to the parents of such children, and the burden these children may become to the State owing to defects, such as partial or complete blindness, deafness, mental deficiency, and so forth.

During the year the Municipality of Edinburgh included in a Parliamentary Private Bill a clause for the compulsory treatment of Venereal Diseases in cases where patients in an infective stage failed to attend for treatment. The clause was rejected ; but if we want to get full value for the time and money spent on the Clinics, some form of notification by number to the Medical Officer of Health of those infective cases that persistently neglect treatment may have to be adopted in the interests of the whole community.

V.—Maternity and Child Welfare.

The number of children born (1,892) and the Birth Rate which was 14.88 per 1,000 living, continued the decline which has been apparent since 1920. Of the 1,892 births, 979 were males and 913 females; 1,796 were legitimate and 96 illegitimate. The percentage of illegitimate births was 5.08.

The number of infant deaths was 206; of these 118 were males and 88 females. Deaths among legitimate children numbered 189 and illegitimate children 17. The death rate per 1,000 born was 109.

The Birth Rate and Infant Mortality Rate are given in detail in Tables IA, IC and IG, and a detailed statement of the causes of and age periods at death in Table VA. The excess deaths were mainly due to Bronchitis and Pneumonia (55 as compared with 28 in 1926).

A comparison with the Infant Mortality figures of the Lancashire and Cheshire Great Towns, relating to the figures for the 52 weeks ended December 31st, 1927, is given in Table IG. The proportion of males and females respectively making up the Birth Rate and Infant Mortality is shewn below :—

	Birth Rate		Infantile Mortality	
	Males	Females	Males	Females
1923	10.01	9.7	107	88
1924	9.69	9.3	122	70
1925	8.8	8.8	144	119
1926	9.0	8.3	98	82
1927	7.70	7.18	121	96

Year	Legitimate Births	Deaths of Legitimate Children	Rate per 1000 born	Illegitimate Births	Per cent of total	Illegitimate Deaths	Rate per 1000 born
1915	2387	...	...	132	5·5	...	...
1916	2150	...	...	143	6·6	...	...
1917	1831	...	...	167	9·0	...	...
1918	1754	...	...	181	10·3	...	...
1919	1984	...	...	174	8·0	...	...
1920	2810	280	99	174	5·8	21	120
1921	2534	278	109	177	6·3	38	215
1922	2350	225	95	132	5·6	17	129
1923	2316	220	95	110	4·5	18	164
1924	2216	202	91	112	4·8	23	205
1925	2088	273	131	86	3·9	13	151
1926	2045	170	83	115	5·3	25	217
1927	1796	189	105	96	5·08	17	177

TABLE Va.

Infantile Mortality, 1927.

Nett Deaths from stated Causes at various Ages under One Year of age.

CAUSE OF DEATH.	Under 1 Week.	1 - 2 Weeks.	2 - 3 Weeks.	3 - 4 Weeks.	Total under 1 Month.	1 - 3 Months.	3 - 6 Months.	6 - 9 Months.	9 - 12 Months.	Total Deaths under One Year.	
All Causes :—											
Certified	50	18	11	6	85	22	27	24	39	197	
Uncertified	3	...	..	...	3	2	1	3	...	9	
										M	F
Small Pox	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	7	7	8	6
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	1	1	1	2	2	3
Diphtheria and Croup	...	...	...	...	...	...	...	1	...	...	1
Erysipelas	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis	...	...	...	...	...	...	...	...	1	...	1
Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases	...	...	...	...	...	...	...	1	1	2	...
Meningitis (not Tuberculous)	...	...	...	...	...	...	2	...	...	2	...
Convulsions	1	...	...	1	2	2	...	2	2	5	3
Laryngitis	...	...	...	...	...	..	...	...	...	...	...
Bronchitis	...	...	...	...	...	3	7	4	2	11	5
Pneumonia (all forms)	...	...	...	...	...	1	9	7	22	22	17
Diarrhœa	...	...	2	...	2	...	...	...	...	2	...
Enteritis	...	...	2	...	2	2	4	1	1	4	6
Gastritis	...	1	1	...	2	1	1	...	...	3	1
Syphilis	1	...	...	...	1	...	...	...	...	...	1
Rickets	...	...	...	..	...	...	...	...	...	...	...
Suffocation, overlying	2	...	...	...	2	...	...	...	...	2	...
Injury at Birth	4	...	...	...	4	...	...	...	...	3	1
Atelectasis	4	...	...	...	4	...	...	...	...	1	3
Congenital Malformations	6	3	3	1	13	5	...	...	1	12	7
Premature Birth	27	10	2	3	42	1	...	...	...	22	21
Atrophy, Debility and Marasmus	1	...	...	...	1	7	3	1	...	10	2
Other causes	7	4	1	1	13	1	1	2	...	7	10
Total	53	18	11	6	88	24	28	27	39	118	88

OTHER DISEASES.

The deaths classified as Other Causes in the preceding Table may be further classified as follows :—

	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	1—3 months	3—6 months	6—9 months	9—12 months	Total
Maternal Eclampsia	1	...	...	...	...	...	...	...	1
Want of attention at Birth	1	...	...	...	...	...	...	...	1
,, ,, ,, ,, (Infanticide)	1	...	...	...	...	...	...	...	1
Haemorrhagia Neonatorum	...	2	...	...	...	...	...	...	2
Asphyxia	1	...	...	...	...	...	...	...	1
Icterus Neonatorum	3	2	...	1	...	...	...	...	6
Pulmonary Embolus	...	...	...	...	1	...	...	...	1
Intussusception	...	...	...	...	...	1	1	...	2
Rhinitis	...	...	1	...	...	...	...	...	1
Croup	...	...	...	...	...	...	1	...	1
Totals	7	4	1	1	1	1	2	...	17

PUERPERAL FEVER.

Four cases of Puerperal Fever and 25 cases of Puerperal Pyrexia were notified, as against 12 cases of Puerperal Fever last year and eight of Puerperal Pyrexia notified in the last three months of 1926.

Among these there occurred three deaths, as compared with eight in the previous year.

Eleven of the cases were treated in the Isolation Hospital, among whom there were ten recoveries and one death.

One fatal case of Puerperal Fever occurred in the Preston Royal Infirmary, and the remainder, one of whom died, were treated at home.

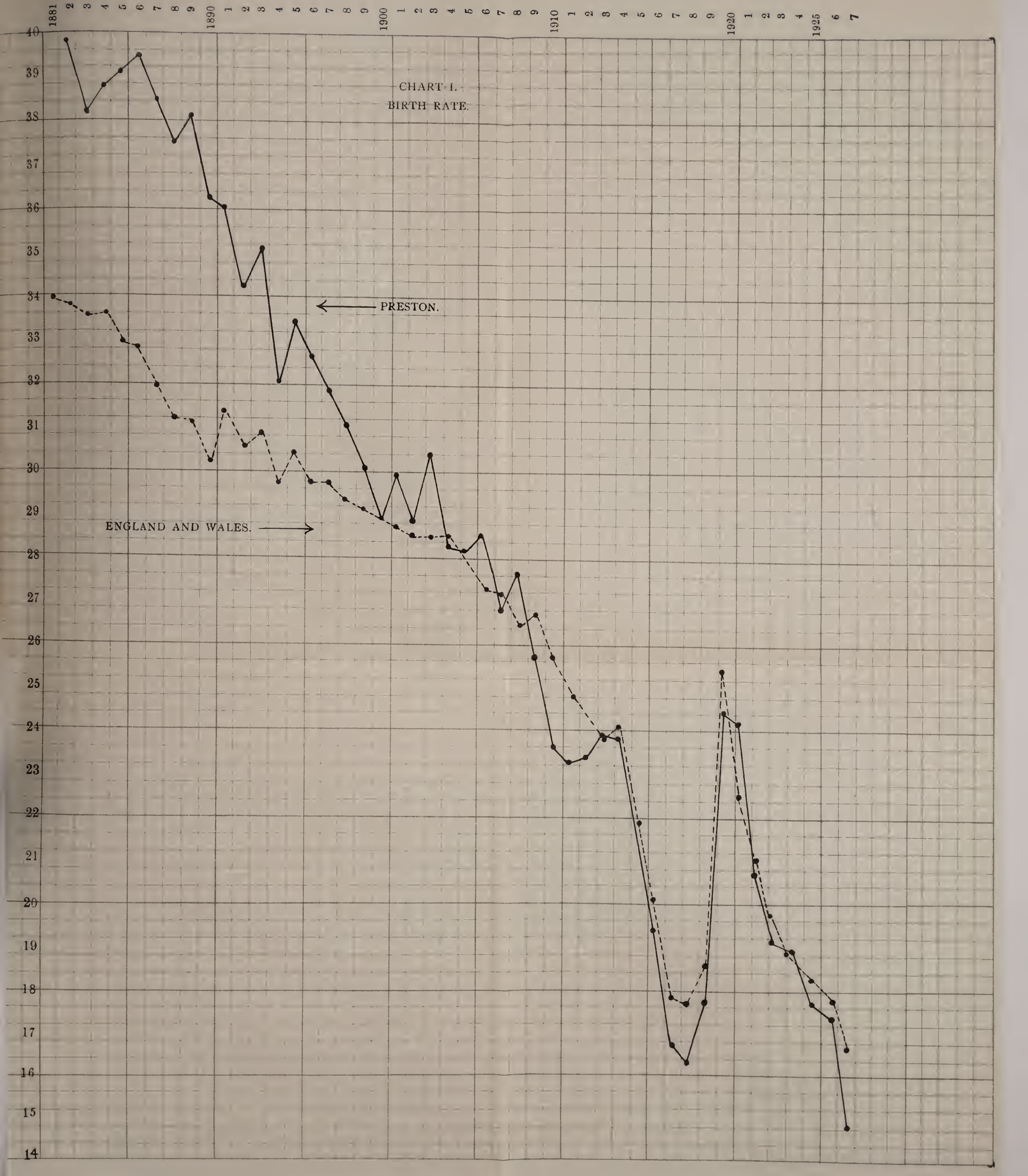

CHART I.
BIRTH RATE.

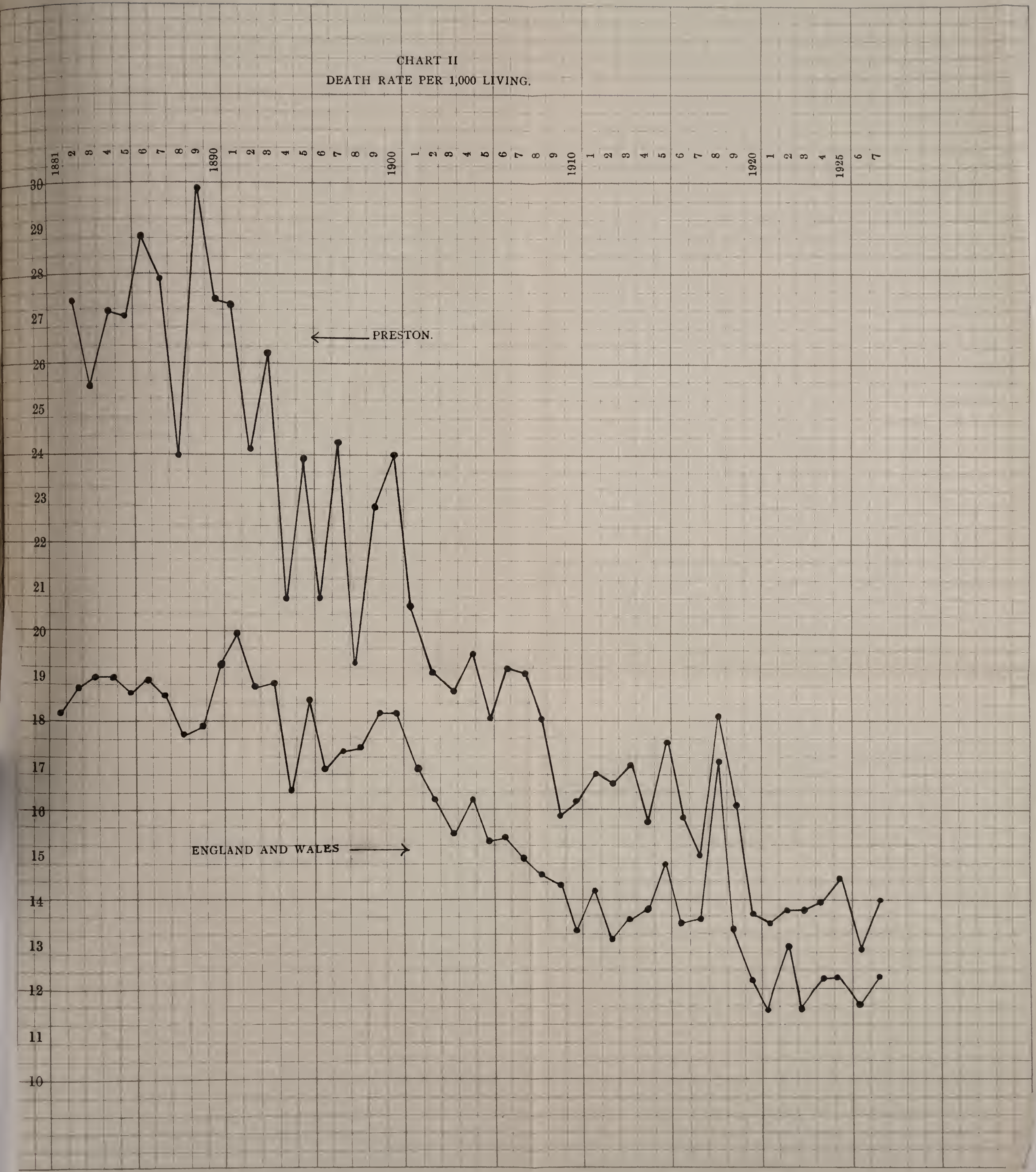

CHART II

DEATH RATE PER 1,000 LIVING.

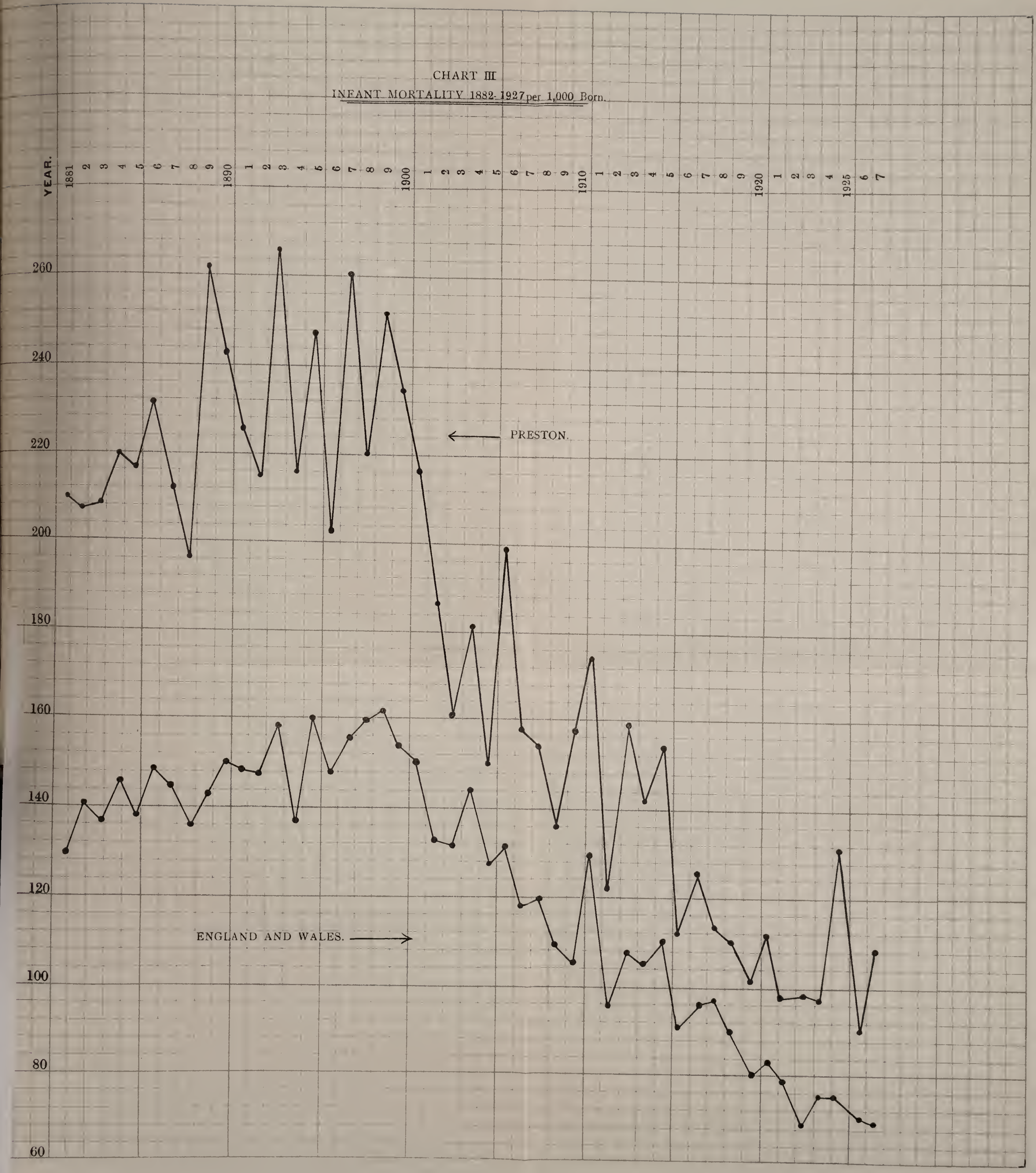

CHART III

INFANT MORTALITY 1882-1927 per 1,000 Born.

TABLE Vb.

Year.	No. of Nett Births	Puerperal Fever.				Other Accidents and Diseases of Pregnancy.		Total Mortality from Child Birth.
		No. of Cases Notified.	No. of Deaths.	Incidence per 1000 Births.	Mortality per 1000 Births.	No. of Deaths	Mortality per 1000 Births.	
1911	2726	6	2	2.20	0.73	13	4.73	5.50
1912	2753	2	1	0.72	0.36	4	1.45	1.82
1913	2888	7	2	2.42	0.69	6	2.08	2.77
1914	2841	7	2	2.46	0.70	20	7.04	7.74
1915	2546	9	5	3.53	1.96	7	2.75	4.71
Average	2751	6.2	2.4	2.26	0.89	10.0	3.61	4.51
1916	2315	3	3	1.29	1.29	3	1.30	2.59
1917	2019	1	1	0.49	0.49	5	2.47	2.96
1918	1906	3	2	1.57	1.05	4	2.10	3.15
1919	2086	9	5	4.31	2.39	4	1.92	4.31
1920	2984	16	9	4.69	3.01	13	4.36	7.37
Average	2262	6.8	4.0	2.47	1.65	6.0	2.43	4.08
1921	2811	8	7	2.82	2.49	8	2.85	5.34
1922	2482	8	3	3.22	1.20	9	3.63	4.83
1923	2426	8	3	3.30	1.24	8	3.30	4.54
1924	2328	8	5	3.40	2.15	8	3.43	5.58
1925	2174	8	6	3.68	2.76	7	3.22	5.98
Average	2444	8.0	4.8	3.28	1.97	8.0	3.29	5.25
1926	2160	*20	8	9.26	3.70	9	4.17	7.87
1927	1892	**29	3	15.33	1.59	6	3.18	4.77

* Includes eight cases of Puerperal Pyrexia notified in the last three months of the year.

** Includes 25 cases of Puerperal Pyrexia.

OTHER ACCIDENTS AND DISEASES OF PREGNANCY.

Six deaths were notified from this cause, compared with nine and seven in the previous years. Of these deaths, one occurred in the Fulwood Poor Law Institution, three at the Royal Infirmary, and two at home.

In three instances the death was directly due to the Parturition and in the remaining three due to diseased conditions aggravated by labour.

There were nine maternal deaths in Preston during the year. Of these, four died in the Royal Infirmary, one at the Isolation Hospital, one at the Fulwood Poor Law Infirmary, and three at home. Of the four who died at the Royal Infirmary, one patient was delivered at home. Labour began at home in another case and in the other two commenced in the Infirmary. There was no instrumental interference in any patient before removal to hospital. In the case of the patient who was delivered at home, it is probable that acute Gonorrhoeal Septicaemia supervened, but as she died within 24 hours of removal, the differential diagnosis was not completed. Of the two cases in which labour began and was completed inside the Infirmary, one had a Caesarian section followed by post-partum eclampsia, and the other had a severe post-partum hemorrhage. In the case of the death at the Isolation Hospital, the patient had an abortion at home. She was attended by her own doctor and later developed Puerperal Septicaemia. The fatal case at Fulwood was suffering from heart and kidney disease and died after Caesarean section.

INSPECTION OF MIDWIVES.

During the year 1927, 48 midwives notified the Local Supervising Authority of their intention to practice. Of these, only 30 were found to be definitely practising, the rest were either engaged in monthly nursing or did not practice for private reasons.

Midwives holding the certificate of the Central Midwives Board—35.

Midwives bona-fide before the passing of the Midwives Act, 1902—13.

90 inspections of midwives were made, 75 on the district for the purpose of inspecting midwifery bags, appliances and records, and 15 at North Road for special reasons, viz., the investigation of cases of Ophthalmia Neonatorum, Puerperal Septicaemia, abnormalities occurring during practice or investigation of complaints by patients.

The clothing and appliances of five midwives were disinfected, four after being in contact with Puerperal Fever and one after a maternal death. One " handy woman " was interviewed several times as to conduct, and was found to have acted in an emergency.

Lectures for midwives were held once monthly during the winter, at North Road. A register of attendances is kept, the average number being 23. Special lectures given were :—

" Pemphigus Neonatorum "	The Medical Officer of Health.
" Difficult Labour " ...	Dr. Mary Lowry
" Ante-natal Care " ...	Dr. R. K. Ford.
" The Toddler "	Dr. Marjorie Harris

The closest co-operation and loyalty exist between the midwives and the Staff of the Health department, and the increased keenness on the part of the midwife to co-operate with the Health Visitors has been a very pleasing feature of 1927.

INSPECTION OF MATERNITY HOMES.

Under the Midwives and Maternity Homes Act, 1926, there were six applications for registration of Maternity Homes. These were inspected ; five were considered suitable and accepted for registration. These were inspected three times during the year and found to be working satisfactorily.

The Ante-natal Centre.

The outstanding feature of maternity and child welfare work during the year has been the marked increase in the number of attendances at the Ante-Natal Centre, which more than fulfilled the expectations held out in 1926. The following figures show the increase :—

	1925	1926	1927
New patients	73	163	272
Attendances	163	352	531

Whilst this figure has been advantageously affected by the popularity of the contributory scheme which commenced in April, yet the number of patients sent by doctor and midwife was definitely higher than last year. Sixty-four patients being sent by midwives as against 25 in the previous year. The number of attendances in proportion to the number of new cases is not as high as it might be. As there is at present only one ante-natal session per week, the minimum number of visits per patient has been insisted upon so as to obviate long waiting, and to strengthen the popularity of the clinic which is still in its infancy. There is still some difficulty in persuading prima-para to go into hospital, no doubt due to the fact that among working class mothers there is more money available for the first confinement than for subsequent ones ; in addition, the mother has usually worked during the year preceding marriage, so that there are two maternity benefits available. There is at present no time to encourage post-natal attendances or to start another clinic for such, as the mothers who have attended this centre seem particularly anxious to return and consult about themselves afterwards.

Mothers were referred to the ante-natal centre from the Infant welfare centres as under :—

Deepdale Mill Street	85
Walker Street	61
Manchester Road	60
Fylde Road	37
Edward Street	29
Total	272

Of the 272 new cases, 77 insured under the contributory scheme, 16 were sent to the Royal Infirmary, and 21 to the Sharoe Green maternity home, and 111 cases were recommended to apply for a free midwife, four patients were admitted to the Sharoe Green maternity home as emergencies. Of the 21, 15 had spontaneous delivery and six had either operative or instrumental interference. There were included in the 15 several patients with various systematic diseases or complications of pregnancy not actually associated with labour. Of the remaining six, two had Caesarean section and two had premature labour induced.

Of the 16 patients sent to the Royal Infirmary, two were admitted for eclampsia, one for ante-partum haemorrhage and four for contracted pelvis. Of the remaining nine, four had instrumental interference and five had spontaneous delivery. The number of patients sent to the Royal Infirmary and the Sharoe Green Maternity Home cannot be definitely kept within the limits of abnormal and normal respectively, as amongst this class of patient there is still some fear of having a confinement in a general hospital.

Fourteen patients were sent from the ante-natal clinic to the venereal diseases department. Of these, 12 were pregnant and two un-pregnant. All the ten expectant mothers were delivered of living babies.

The following is an extract from the Annual Report of the Preston Infant Welfare Voluntary Workers' Association.

DINNERS FOR EXPECTANT MOTHERS.

" For some time the Committee have been desirous of formulating a scheme for providing dinners for necessitous expectant mothers. Since December, 1927, this scheme has been in operation, and expectant mothers can now obtain free dinners three days weekly. All mothers are under the supervision of Dr. Critchley, and those are eligible who come within the Ministry of Health scale for free milk.

Dr. Critchley is already eminently satisfied with the results obtained, and at her request the period of providing free dinners has been extended to each mother until three months after the baby's birth. Your Committee are convinced that this is a form of maternity welfare which cannot be too strongly emphasised.

NUMBER OF DINNERS GIVEN AT EACH CENTRE.

1927	Deepdale Mill Street	Fylde Road	Edward Street	Manchester Road	Walker Street	Total
December 31	23	8	49	64	39	173
1928						
January 31	46	34	11	90	24	205
February 29	71	30	24	66	8	199
March 31 ...	113	85	22	22	12	254
April 30 ...	125	196	14	7	18	260
Total, 5 mths.	378	353	120	249	101	1091

87 Expectant Mothers have received dinners.

There were two special events during 1927 :—

(1) A meeting of the North-Western Federation for Maternity and Child Welfare was held at the Town Hall on the 28th January, 1927. About 70 people were present including delegates from other towns. An inspection was made of the North Road clinics, and then a visit was paid to the Sunlight Department of the Preston Royal Infirmary. On returning to the Town Hall a very interesting paper was read by the Medical Officer of Health on " The Insurance of Midwives' cases against the payment of Doctors' Fees." This was followed by a most excellent discussion in which general practitioners and midwives took part.

(2) Baby Day. This was held on the last Thursday in July in Moor Park and took the form of a pram parade. There were prizes for the best decorated prams for each centre, and there was an excellent exhibition of cookery, laundry and thrift garments. The Mayoress of Preston (Mrs. Hunt) kindly attended and distributed the prizes. However little, from an educational point of view, the value of Baby Day is in this form, it is certainly a matter of great joy to the mothers to have an open-air function.

There are 43 regular voluntary workers at the Infant Welfare Centres and also a few occasional ones. They perform routine clerical work, provide tea for the mothers and give general assistance at the lectures. They also arrange an annual Christmas party and summer picnic, and last year provided several daily outings to Blackpool for expectant mothers. In the autumn of 1927 they inaugurated a scheme of free dinners to expectant mothers thrice weekly—a scheme which has met with success, and which is already proving its utility by the increased health of the newly-born. The Medical Officer of Health acknowledges with gratitude the loyal co-operation of the Voluntary Workers to his department and the value of their unselfish devotion to the poor mothers of Preston.

INFANT WELFARE CENTRES.

The attendances for 1927 were well maintained. During the winter three courses of lectures were given at each centre. There were six lectures in cooking and dressmaking, three lectures in housewifery and eight lectures on home nursing. The eight lectures on home nursing given by the Health Visitors, comprised a very comprehensive syllabus on the home treatment of minor ailments such as burns and scalds, etc., and included instruction on the isolation of an infectious case such as measles. The lectures in cooking and dressmaking were given by specially qualified teachers in these subjects and were very much appreciated by the mothers.

MASSAGE CENTRE.

Miss Spencer, the masseuse, was appointed on a half-time basis in the spring of 1927. The full session of bi-weekly treatments commenced on May 1st. The basis of this work is prevention, but for which, a large proportion of the babies treated would have developed into cripples. The number of patients has been 114, of whom 20 have had deformities corrected by massage, 40 have been benefited and 54 are still in attendance. 2,287 Treatments have been given in the following cases, Rickets, Deformities, Fractures, Spastic Paralysis, Constipation and Debility. A marked feature is the enthusiasm of the mothers for the work of the clinic, which has been shewn in the regular attendance over the long periods necessary for cure.

No. on Register, January 1st, 1927	32
No. of new patients	82
No. discharged	60
No. remaining on Register 31st December, 1927	54
No. on waiting list	19
No. of treatments given	2287
No. of cases in which deformity was corrected	20
No. of cases benefiting from treatment given	40

The completed cases may be classified as follows :

Rickets	26
Deformities	20
Fractures	2
Spastic Paralysis	1
Constipation	2
Weakness and flabby muscles	9

Maximum No. of treatments	19
No. of sessions	145
Average treated per session	15

TABLE Vc.

	Total No. of Births Registered	Nett Births	Nett Infant Deaths	Puerperal Fever and Pyrexia		Deaths from other diseases of Pregnancy and Parturition
				Cases	Deaths	
Private Houses	1487	1476	157	...	1	2
Nursing Homes	55	21	2	...	...	...
Royal Infirmary	220	140	19	...	1	3
Isolation Hospital	...	...	12	...	1	...
Midwives Homes (four) ...	40	29	1	...	...	..
Other Institutions .... (Inward Transfers)	...	226	15	...	...	1
Total	1802	1892	206	...	3	6

TABLE Vd.

Attendance on Women at Child Birth.

THE BIRTHS WERE ATTENDED BY :—	District **1**	District **1a**	District **2**	District **3**	District **4**	District **5**	District **6**	**Total**	% 1926	% 1927
Midwives alone	119	138	165	155	131	161	80	949	61	54
Doctors and Midwives	76	102	134	90	96	99	63	660	31	38
Doctors and Monthly Nurses ..	50	...	8	14	...	11	...	83	2	5
Doctors and Unqualified Women	11	8	9	1	11	15	9	64	6	3
TOTALS	256	248	316	260	238	286	152	1756		

TABLE Ve.

Notification of Births

Received from :—

District	Midwives	Doctors	Parents	Royal Infirmary	Private Nursing Homes	Total
1	175	...	12	26	21	234
1A	159	...	9	21	20	209
2	218	...	21	31	31	301
3	219	2	23	11	39	294
4	193	1	10	21	32	257
5	193	2	14	24	31	264
6	97	...	9	5	20	131
	1254	5	98	139	194	1690

ATTENDANCE AT INFANT WELFARE CENTRES.

The attendances at the centres have increased during the year. The actual numbers will be seen in the table below.

The growth of the work is indicated by the following statement of attendances at the centres since 1917 :—

TABLE Vf.

Situation of Centre	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
Deepdale Mill Street	1471	1836	1741	2722	3318	3509	4024	4137	4072	4277	4262
Walker Street	3051	2536	2398	2850	2824	4150	5233	5728	5965	5732	4547
Fylde Road	1771	2402	1543	2648	2732	2338	2889	3322	2929	3783	4248
Edward Street	72	1280	997	754	1639	1896	2362	3345	3261	3816	2690
Manchester Road ...	1435	1774	1811	1991	2507	2488	2990	4509	3892	3980	3913
North Road	...	...	83	203	180	384	397	386	163	352	1191
Totals	7750	9828	8573	11168	13200	14765	17895	21427	20282	21940	20851

TABLE Vg.

Number of Attendances at Maternity and Child Welfare Centres and at the Ante-Natal Clinic.

Situation of Centre	Total Infants (a)	New Infants included in (a) (b)	Older Children	Expectant Mothers	Total Attendances
Deepdale Mill Street .	3134	222	920	208	4262
Walker Street	3329	200	1075	143	4547
Fylde Road	3225	298	820	203	4248
Edward Street	2120	156	427	143	2690
Manchester Road	2967	221	748	198	3913
Ante-Natal Clinic, North Road	660	84	...	531	1191
Totals	15435	1181	3990	1426	20851

Three hundred and fifty five persons received free food in the form of cows milk or dried milk from the Corporation. The total amount involved was £708 5s. 4d., and the average cost per head equalled £1 19s. 11d. or 2s. 4d. less than in 1926. The investigation of the income of applicants and the administration of the scheme, together with that relating to the provision of Home Helps, midwives and doctors, absorbs a tremendous amount of work on the part of the staff and the responsible Sub-Committee. At each monthly meeting over 150 individual cases have to be considered with full reports on each. Co-operation with the Board of Guardians, the Pensions Committee, the Employment Exchange, the Friendly Societies and charitable agencies is maintained by diligent enquiries and collation of information.

Two hundred and fifty-two cases were taken off the list during 1927 on account of improvement in circumstances, death or removal. On the average these cases received free milk for 133 days each, and the shortest length of time occurred in emergency grants covering the interval between the fortnightly meetings of the Committee. The longest were periods of over three years. A summary is appended.

In addition to the provision of milk, dried milk, Ovaltine, etc., necessitous cases were further helped by the provision, by the Council, of a doctor, midwife or home help, at confinement in 126 cases free of charge, whilst in 41 cases the person applying for assistance was required to pay a portion of the cost.

On medical grounds 12 cases were advised to go into the maternity wards of the Preston Royal Infirmary for confinement, and for similar reasons, or because of inadequacy of accommodation at home, 25 cases were sent to the Sharoe Green Maternity Home. In eight cases the whole cost was borne by the Council, whilst in 29 cases the applicant was required to pay a portion of the cost as arranged by the Sub-Committee.

Tabular Statement of Number of Persons in receipt of Free Milk during 1927 and the length of time for which it was made available (completed cases only).

Months	Persons	Months	Persons	Months	Persons
1	31	13	1	25	1
2	40	14	1	26	1
3	39	15	...	27	1
4	31	16	3	28	...
5	33	17	1	29	...
6	19	18	...	30	...
7	10	19	1	31	...
8	14	20	...	32	...
9	9	21	...	33	1
10	5	22	...	34	...
11	4	23	...	35	...
12	2	24	1	36	3

Full particulars of the applications received in respect of the various services rendered at confinement and the Sub-Committee's decision are given below in tabular form.

Emergency Calls by Midwives for Medical Assistance

(Midwives Acts, 1902 and 1918).

Year.	No. of Applications to be helped to pay. Doctor's Accnt	Whole Cost Granted.	Part Cost Granted.	Not Granted.	Cost Borne by Council.	Cost Borne by Applicant.	Average Cost per instance.
1924	47	37	Nil.	10	£93 11 0	£18 16 0	£2 7 9
1925	70	60	2	8	£121 2 6	Nil.	£1 14 7
1926	76	63	5	8	£121 14 6	£11 7 6	£1 15 0
1927	105	46	20	39	£162 15 6	£32 7 0	£1 11 0

Services of Midwives.

Year.	No. of Applications for Sevices of Midwife.	Whole Cost Granted.	Part Cost Granted.	Not Granted.	Cost Borne by Council.	Cost Borne by Applicants.	Average Cost to Council per case assisted
1924	137	115	Nil.	23	£146 10 0	Nil.	£1 5 6
1925	121	92	10	19	£127 1 3	£2 11 3	£1 5 5
1926	144	115	10	19	£154 0 3	£5 12 9	£1 5 6
1927	111	71	15	25	£108 0 0	£7 1 3	£1 5 1

Services of Home Helps.

Year.	No. of Applications for services of Home Help	Whole Cost Granted.	Part Cost Granted.	Not Granted.	Cost Borne by Council.	Cost Borne by Applicants.	Average Cost to Council per case assisted
1924	40	31	4	5	£89 15 0	£3 0 0	£2 11 6
1925	46	29	6	11	£88 5 9	£3 3 0	£2 12 2
1926	17	9	5	3	£28 15 9	£9 4 0	£2 14 11
1927	16	9	6	1	£33 15 6	£2 11 0	£2 5 0

Beds at the Sharoe Green Maternity Home.

Year.	No. of Applications for Bed.	Whole Cost Granted.	Part Cost Granted.	Not Granted.	Cost Borne by Council.	Cost Borne by Applicants.	Average Cost to Council per case assisted
1926	8	3	¼ cost in 1 case; Maternity Benefit to be paid in 3 cases.	1	£30 16 6	Nil.	£5 2 9
1927	29	4	½ cost in 2 cases; Maternity Benefit to be paid in 19 cases (of these, 4 were women confined at home).	4	£103 17 0	£32 10	£4 18 11

Beds in the Maternity Ward at the Royal Infirmary.

Year.	No. of Applications for Bed.	Whole Cost Granted.	Part Cost Granted.	Not Granted.	Cost Borne by Council.	Cost Borne by Applicants.	Average Cost per instance.
1926	15	7	¼ cost in 2 cases; ¾ cost in 2 cases; Maternity Benefit to pay in 2 cases	2	£62 13 10	£16 14 6	£6 2 2
1927	12	4	¼ cost in 1 case; M.B. to pay in 7 cases	nil	£69 16 6	£10 16 0	£5 16 2

DENTAL TREATMENT.

Mr. Gardner, the Dental Surgeon, reports as follows :—

" The number of cases attending for treatment was 132. Of these 63 were children.

It is a disappointment to find that in spite of the treatment given it is still necessary to extract three teeth for every one that can be saved by filling. The average mother neither comes herself nor brings a child to the clinic until toothache sets in, by which time the teeth are past saving. It is hoped that in future parents will become more enlightened and see the necessity for prompt and early dental treatment."

Dentures were provided in 24 cases, particulars of which as to cost are given below.

No. of Applications for Dentures		No. of Applications			Cost borne by	
		Not Granted	Granted Free	Part Cost Granted	Applicant	Council
					£ s. d.	£ s. d.
1926	13	2	1	10	10 0 0	33 15 0
1927	24	2	nil	22	14 7 6	26 17 6

The following figures show the number of patients who attended the Dental Clinic, the number of attendances made by them, and also the character of the dental work performed.

Number of extractions ...	369	Average number per session ...	7.70
Number of fillings	122	,, ,, ,, ...	2.75
Number of dressings ...	107	,, ,, ,, ...	2.23
Number of scalings	135	,, ,, ,, ...	2.81
Dentures provided	22		
Total attendances ...	461	Number of Mothers attended ...	69
		Number of Children attended...	63

TABLE Vh.

Statement of Sale of Foods and Free Supplies during the year 1927.

	Value of Foods Sold	Value of Foods Supplied Free
	£ s. d.	£ s. d.
Cows Milk	Nil.	503 7 9
Dried Milk	380 4 6	164 12 9
Lactogol	3 7 6	0 2 6
Virol	114 2 10	13 13 0
Ovaltine...	295 4 9	21 6 0
Cod Liver Oil Emulsion	31 3 7	3 15 0
Cod Liver Oil and Malt	5 17 6	0 7 4
Parish's Chemical Food	4 2 4	1 1 0
Total	834 3 0	708 5 4

	1927			1926			1925			1924			1923		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Value of Foods Sold.	834	3	0	1092	17	0	1114	17	0	958	10	6	1039	7	0
Value of Foods Supplied Free	708	5	0	1244	14	4	1556	4	6	1509	10	8	932	4	1

Legislative Acts dealing with Maternity and Child Welfare which came into operation during the year :—

Nursing Homes Registration Act, 1927. This Act provides for the registration and inspection of nursing homes. It puts nursing homes on the same footing as maternity homes which became registerable under the Midwives and Maternity Homes Act, 1926.

The following report on the working (April 1st, 1927—March 31st, 1928) of the contributory scheme by expectant mothers whereby the payment of doctors' fees called in by a midwife in emergency is borne by the Council, was submitted to the Maternity and Child Welfare Committee in May, 1928.

For the purpose of refreshing the minds of the members of the Maternity and Child Welfare Committee, and particularly for the benefit of members who have joined the Committee since the original scheme was adopted, it is proposed firstly, to go over some of the points which were explained in the original memorandum, and which appear to be the subject of some misunderstanding.

Under Section 14 of the Midwives Act of 1918 it was made obligatory upon the Council to assume the prime liability, with power to recover, for the payment of doctors' fees, where the doctor was called in by a midwife in an emergency. These emergencies relate to conditions arising in confinement, and are carefully laid down in the Rules of the Central Midwives Board. These rules are in the hands of the midwives and points arising out of them and proper interpretations have been fully explained to the midwives at periodic meetings of their Association and also to individual midwives as occasion has arisen. The midwife must call in a doctor when any of these emergencies arise. The midwives have a further duty. They must send for the doctor on a prescribed form (A) and must send a duplicate to the Medical Officer of Health, form (B), upon which must be stated the nature of the emergency. The Council, be it noted, has no liability whatever for medical fees contracted in any other way than the above ; the person sending must be a midwife, there must have arisen a carefully defined emergency and the messenger must take a prescribed form. The next stage is the sending of an account to the Medical Officer of Health by the doctor. This account is on a form supplied by the Public Health Department and on the reverse side the fees which may be charged are set forth. These fees are not defined locally but by the Ministry of Health. In a fair number of instances the liability is treated as a private matter between doctor and patient and the Department do not receive the account. In the remaining instances, however, the doctor's account is paid by the Council. An application form is then sent by the Medical Officer of Health to the beneficiare and from the statements made as to income (verified in each case by enquiry) and a comparison with the scale of income adopted by the Council, the amount to be recovered by the Council is determined by the Milk, Medical and Other Services Sub-Committee of your Committee.

THE SCHEME.

Under the Midwives and Maternity Homes Act, 1926, Section 2(3), a Local Supervising Authority is empowered, with the sanction of the Ministry of Health, to make arrangements whereby an expectant mother can by the prior payment of an agreed sum insure against the liability for the payment of a doctor's fee under Section 14(4) of the Act of 1918.

The previous experience of the Committee has been that in roughly 6 per cent. of all cases attended by a midwife, an emergency as defined by the rules has arisen and that the average fee due to the doctors has been 32s. 0d. Now in any contributory scheme, the amount of premium necessary to cover the risk is equal to the proportionate number of calls for the doctor; that is to say, if the doctor's services are required in 1 per cent. of the contributors' cases, then the premium equals 1 per cent. of 32s. 0d., or 3.84 pence, and in 6 per cent. equals 1s. 11d. It was thought, however, that many contributors would be drawn from women who have hitherto engaged a doctor privately, and that we might reasonably expect 12 per cent. of doctors' calls. In view of this conjecture and to provide for contingencies, the fee was fixed at 5s. 0d., which represents slightly under 16 per cent. of doctors' calls.

This scheme, adopted by the Council on the 24th February, 1927, received the approval of the Ministry of Health for one year. It was put into operation on the 1st April, 1927. The utmost publicity was given by :—

(1) Notification to the Doctors.
(2) Lectures to the Midwives.
(3) Leaflets issued to the women attending the Welfare Centres.
(4) Personal canvassing in the homes by the Health Visitors.

The results in brief are these :—

156 Women have subscribed 5s. 0d. each.
Doctors have been sent for in 75 instances.
56 Confinements have taken place without medical assistance.
25 Confinements had not, up to the end of the year's working, taken place.

Parallel with this scheme, medical aid has been sought by midwives for women who have not become subscribers and in their case the machinery of ascertainment, verification and the fixing of the proportion to be borne by the beneficaire has been set in motion. The figures are as follows :—

Comparison of Gross Cost—1st April, 1927, to 31st March, 1928. Insured and Non-Insured Calls for Medical Assistance.

	No. of Doctors Calls	Total Cost	Borne by Council	Borne by Patients	Doctors not Required	Not taken Place
Insured—156 ...	75	£144/2/0	£105/2/0	£39/0/0	56	25
Non-Insured 1119	83	£146/2/6	£110/12/0	£35/9/9	...	...

Assuming that in the case of the uncompleted 25 cases in the insurance scheme the rate of doctors' calls is in the same proportion as in the completed cases, we have :—

Comparison of Cost per completed Case Insured (estimated) and Non-Insured.

	No. of Contributors	Doctors' Calls	Average Cost per Case	Borne by Council	Borne by Patient	Percentage of Doctors Calls
Insured ...	156	90	£1/18/6	£1/9/10	*8/8	57·7
Not Insured ...	1119	83	£1/15/2	£1/6/7½	8/6½	7.4

*The figure 8/8 represents the average receipt in respect of the 90 insured patients sending for a doctor, actually each of the 156 insured persons contributed 5s. 0d. each.

If the cost be spread out over the whole of the insured women and the non-insured respectively we have :—

Total Cost per Person		Borne by Council		Borne by Patient	
Insured	Non-Insured	Insured	Non-Insured	Insured	Non-Insured
£1/2/2½	31.34d.	17/2½	23.72d.	5/-	7.62d.

The points which emerge from the above figures are :—

(1) The increased cost per medical case from £1/12/0 in 1926 to £1/18/6 in the case of contributors, and to £1/15/2 in the case of non-contributors.

The explanation is due to the fact that the doctors called in for a particular emergency, tend more and more to assume complete attendance during the lying-in period. This is eminently satisfactory to the patient and to the doctor, as the opposite tendency left the responsibility with the doctor without the necessary control.

(2) The very great increase in the percentage of doctors calls in contributory cases (57.7 per cent.) as against a stationary figure for the non-contributors (7 per cent.).

There are two factors at work : (1) Women who have contributed feel they have a right to the services of a doctor, whether or no, and the midwives are hard put to it to resist the demand. In this connection it is of interest to note that amongst the 75 completed insured cases in which medical aid was sought, the emergency was described as " delayed labour " in 41 or 54 per cent. In the non-insured cases the corresponding figures were 23 or 27.71 per cent. Now the Committee is fully aware that in child-birth, unnecessary interference with the natural order of things is detrimental to the welfare of mother and child. I have no evidence that instrumental delivery is resorted to unduly, but we must take into account the fact that on the doctor's arrival he is faced with the probably voiced expectation of both midwife and patient. At any rate, one is forced to the conclusion that the midwives are interpreting their duties liberally in the case of contributors, or failing to recognise " emergencies " in the case of non-contributors to the scheme.

Before the introduction of the contributory scheme, the sending for the doctor in an emergency was treated as a private matter between doctor and patient in 27 per cent. of cases so sending, and the account was paid direct. Whereas in the non-contributory cases during the period covered by this report, the percentage of bills has fallen to 9.79 per cent.

The evidence produced seems to show that the scheme has not been used by women of the poorer classes, but has made a powerful appeal to the better circumstanced and to those perhaps whose previous confinements have taught them that they will in any case require medical attention and have seen in our scheme a ready method in getting it for a purely nominal expenditure.

I have made enquiries from the two Authorities which have had experience of the scheme, and by the courtesy of the Medical Officer of Health am able to put the following information before you :—

COUNTY OF HAMPSHIRE.

Dr. R. A. Lyster informs me that 75 per cent. of all births are attended by midwives, and that in 34 per cent. of these medical aid was sought. The total payments were £2,086, receipts £753, the nett cost to the County being £1,333. The insurance scheme began in 1926. 2,718 Women out of 5,554 attended by midwives, or 49 per cent., became contributors, compared with 45 per cent. in the previous year. There were 1,211 calls for the doctor representing 45 per cent. of those insured as compared with 43 per cent. in the previous year. Before the scheme came into operation the calls represented about 25 per cent. of the midwives' cases, and the rate remains steady among the non-contributors. The cost of doctors' services was £1,576 and the receipts from premiums £679. Dr. Lyster summarises his results which are included for the sake of comparison, with those obtaining in Preston and the County of Somerset.

County of Somerset.

Dr. Savage informs me that 59 per cent. of all births were attended by midwives and that in 28.7 per cent. of these medical aid was sought. The total payments were £1,072 11s. od, receipts £657 12s. od., the net cost to the County being £414 19s. od. The scheme came into force in May, 1918, it being started as a voluntary arrangement. Apart from minor modifications the only alteration from the original scheme was the raising of the contributory scheme from 2s. od. to 5s. od. 2,630 Women out of 3,402 attended by midwives or 77.28 per cent. became contributors. There were 705 calls for the doctor, representing 26.8 per cent. of those insured.

Dr. Savage considers that the contributory scheme is only in part responsible for the high percentage of calls, as in the neighbouring County of Gloucester, where there is no scheme, the percentage is the same as in Somerset. He also thinks that if he had really competent midwives properly working the calls would be about 18-20 per cent. Other points in the Somerset scheme is an income limit of £160, and a special enquiry is made in every case where the emergency is described merely as "delayed labour."

Comparative Cost per Unit.

	All Insured Mothers.			All Non-Insured Mothers.		
	Total Payments By Council	Amount Received	Nett Cost	Total Payments by Council	Amount Received	Nett Cost
Preston ...	£1/2/2½	5/-	17/2½	31.34d.	7.62d.	23.72d.
Hampshire	11/7	5/-	6/7	3/7	6d.	3/1
Somerset	8/2	5/-	3/2	1/11	8.6d.	14.4d.

TABLE VI. SUMMARISED STATEMENT OF THE WORK OF THE HEALTH VISITORS.

District	Wards	Visits to															Total Visits
		Ante-Natal Cases	Births		Older Children				Disease Conditions								
			1st Visits	Re-Visits	1—2 years	2—3 years	3—4 years	4—5 years	Ophthalmia Neonatorum	Puerperal Fever	Pneumonia	Measles	Whooping Cough	Mumps, Chicken Pox, etc.	Epidemic Enteritis	Erysipelas	
1	Fishwick .... Ribbleton	115	256	854	522	307	232	478	6	2	19	600	13	43	1	3	3451
1A	Deepdale .... Park (part of) ...	98	248	890	540	279	75	156	1	6	14	563	15	174	...	4	3063
2	Park (part of)...... Trinity	135	316	1223	813	640	476	368	14	3	39	639	47	60	...	3	4776
3	St. Peter's . ... Moorbrook	153	260	1082	312	455	333	153	24	10	21	517	20	61	2	7	3410
4	Christ Church ... Ashton	156	238	851	524	531	472	293	4	9	18	521	33	255	7	8	3920
5	St. John's .... Avenham	147	286	821	567	424	306	336	31	3	35	462	27	207	2	8	3662
6	Maudland..........	42	152	1044	330	331	313	260	1	1	11	281	15	225	1	3	3010
	Totals	846	8521		10826				5099								25292

VI.—Housing.

That portion of the work of the Public Health Department relating to the fitness of dwellings has been dealt with in Section II. A summary appears in the appended Schedule :—

In the Inspections under the Housing Regulations, 1910, attention is directed to the number of rooms per house, and the number of persons occupying them. The following are the facts elicited :—

Enquiries re Housing—129. Total Occupants—548.

TABLE VIa.

No. of Rooms per House.	Number of Persons per House.												Total.	
	1	2	3	4	5	6	7	8	9	10	11	12		
	No. of Families.												Houses.	Occupants.
1 Room ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 Rooms ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 Rooms ...	...	1	...	...	...	...	...	...	...	...	...	...	1	2
4 Rooms ...	2	21	30	17	17	12	5	3	2	...	...	1	110	448
5 Rooms ...	...	1	...	4	3	2	5	...	...	...	...	...	15	80
6 Rooms ...	...	...	...	2	...	...	...	...	...	1	...	...	3	18
7 and over ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Families ...	2	23	30	23	20	14	10	3	2	1	...	1	129	...
Total Persons ...	2	46	90	92	100	84	70	24	18	10	...	12	...	548

The figures above the heavy lines represent families living under conditions of overcrowding, that is, more than two persons per room.

The table shows no evidence of gross overcrowding, the average number of persons per house being 4.40, as compared with 4.26 at the 1921 Census ; 3 houses (2.33 per cent.) were overcrowded. The occupants of these overcrowded houses numbered 30 or 5.5 per cent. of the whole ; the corresponding figure at the 1921 Census was 7.4.

The Census of 1921 gives the population of the Borough as 117,406, an increase of 293 since 1911. The Registrar-General estimates the population in the middle of 1927 to be 127,100 or 2,900 more than in 1926, and an increase since 1911 of 9,987. The natural increase, that is the excess of births over deaths, was 8,478.

The houses erected since the 1911 Census are shewn below to amount to 3,095, which on the basis of 4.31 persons per house—the density at the 1921 Census—is sufficient to house 13,339 persons, and more than allows for the natural increase.

No. of Houses built each year 1911 to 1927.

Year	No.		
1911	193		
1912	143		
1913	142		
1914	118		
1915	95		
1916	45		
1917	19		
1918	2		
1919	1		
1920	13		
1921	8	+226	by the Council.
1922	33	+244	,, ,,
1923	50		
1924	186		
1925	367	+190	,, ,,
1926	248	+253	,, ,,
1927	409	+110	,, ,,
	2072	+1023	,, ,,

The following information has been extracted from the minutes of the Housing Committee for January, 1928 :—

HOUSING ACT, 1925.

Amount of advances to 31st March, 1927	£296,693 14s. 0d.
Total amount of advances to date	£435,350 5s. 0d.
Amount outstanding at date	£387,683 18s. 2d.
No. of Houses	1065

SMALL DWELLINGS ACQUISITION ACTS.

Amount of advances to 31st March, 1927	£193,950 0s. 0d.
Total amount of advances to date	£197,901 0s. 0d.
Amount outstanding at date	£165,613 17s. 9d.
No. of Houses	602
No. of Subsidy houses in respect of which Certificate "A" has been issued	1332
No. of Subsidy houses completed	1182

HOUSING SCHEDULE.

Number of new houses erected during the year :—

(a) Total	519
(b) As part of a municipal housing scheme	110

1.—INSPECTION.

Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts)	4207
Number of dwellinghouses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910	129*
Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	—
Number of dwellinghouses (exclusive of those referred to in the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	3921

* Included in 4,207 above.

2.—REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their Officers	3368

3.—ACTION UNDER STATUTORY POWERS.

(a) Proceedings under Section 3 of the Housing Act, 1925 :—

Number of dwellinghouses in respect of which notices were served requiring repairs	—
Number of dwellinghouses which were rendered fit—	
(a) by Owners	—
(b) by Local Authority in default of owners	—
Number of dwellinghouses in respect of which Closing Orders became operative in pursuance of declarations by owners intention to close	Nil.

(b) Proceedings under Public Health Acts—

Number of dwellinghouses in respect of which notices were served requiring defects to be remedied	45
Number of dwellinghouses in which defects were remedied—	
(a) by Owners	45
(b) by Local Authority in default of owners	—

(c) Proceedings under Sections 11 and 14 of the Housing Act, 1925.

Number of representations made with a view to the making of Closing Orders	8
Number of dwellinghouses in respect of which Closing Orders were made	8
Number of dwellinghouses in respect of which Closing Orders were determined, the dwellinghouses having been rendered fit	—
Number of dwellinghouses in respect of which Demolition Orders were made	—
Number of dwellinghouses demolished in pursuance of Demolition Orders	—
Number of dwellinghouses voluntarily demolished	1

COUNTY BOROUGH OF PRESTON.

THE SCHOOL MEDICAL SERVICE.

ANNUAL REPORT

For the Year ending 31st December, 1927.

The Medical Service Sub-Committee of the Education Committee:

The Chairman of the Education Committee (Mr. Alderman Snelham)
(deceased February 1st, 1928).

The Chairman of the Higher Education Sub-Committee
(The Rev. Canon Morris).

The Vice-Chairman of the Higher Education Sub-Committee
(Mr. Councillor Collinson, M.D., F.R.C.S.).

The Chairman of the Elementary Education Sub-Committee
(Mr. Councillor Adkins).

The Vice-Chairman of the Elementary Education Sub-Committee
(Mr. Councillor Ley).

Mr. Alderman Durham.
Mr. Councillor Herbert.
Mrs. Councillor A. M. Pimblett.
Mr. Councillor Thos. Parkinson.
Mr. Councillor Partington.
Mr. Councillor Francis.
Mr. Councillor Ward.

James Yates, Esq.
J. J. Rawsthorn, Esq.
W. E. Atkinson, Esq.
Miss McCourty.
Mrs. Megahy.
Mrs. Hindmarsh.

1.—Officers:

Superintendent School Medical Officer: F. A. Sharpe, M.D., B.S., D.P.H.

Assistant School Medical Officers: Elizabeth Rose, M.B., Ch.B., F. C. S. Bradbury, M.B., B.Ch., B.A.O.

Dental Surgeons: E. Hutson, L.D.S., R.C.S., Eng.; A. M. Radcliffe, L.D.S., Manch.

School Nurses: M. E. Marsden, A. Butterfield, D. G. King, G. Whalley, M. E. Booth, E. B. Pilkington.

Clerical Staff:

T. Gray. M. Chapman. G. C. Raby.

TO THE CHAIRMAN AND MEMBERS OF THE EDUCATION COMMITTEE.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to submit the Annual Report upon the Medical Inspection of School Children for the year 1927.

The number of children examined at the routine inspections shows no very marked change. Consequent upon new definitions of age groups, the number of children examined at the routine inspections was 600 less than in 1926. A diminished number of new entrants must be anticipated corresponding with the rapid and marked fall in the birth rate in recent years. The appointment of additional nurses has enabled the staff to undertake more home visits, chiefly in connection with following up dental cases requiring treatment, and to examine more children in schools with regard to their hygienic condition.

There has been a steady growth in the use made of these clinics and the 1927 figures are 50 per cent. higher than those of 1923.

The dental scheme shows steady growth but as indicated by the " treatment refused " figures has not yet obtained the same public acceptance as the medical facilities. The principal reasons appear to me to be that the present generation is not accustomed to view preventive dental hygiene as of prime necessity and, further, they associate preventive dental work with pain. This outlook is founded in error and it is confidently expected that the new arrangements permitting the following up of cases requiring treatment and the active canvassing of indifferent, unwilling and vacillating parents will have the desired effect.

A rapid summary of the detail work given in the report shews a large increase in the number of routine inspections in the schools and of the number of casual children presenting themselves for treatment with a consequential effect upon the number of fillings, extractions and gas administrations.

With regard to medical treatment other than that afforded at the Minor Ailments Treatment Clinic, a large increase in the surgical treatment of enlarged tonsils and adenoids is recorded. The appointment of an additional operating surgeon at the Royal Infirmary has, no doubt, enabled this to be done, but an increased readiness on the part of parents to have their children treated must be recorded.

The clinic for correction of errors of vision, established in 1925, has continued its good service.

Dr. Bradbury, Assistant School Medical Officer, has prepared special reports upon the after history of children treated as delicate children at the Open Air School which I think puts our work at that Institution in an even better light than your Committee can have hoped for. The same officer contributes reports upon special electrical treatment of cases of ear diseases, and upon the working of the new scheme for the supervision and treatment of crippled children. Reports upon the height and weight of pupils attending the Secondary Schools have also been made which are of great interest and value.

A scheme for the installation of artificial sunlight treatment was put into operation at the end of the year and should do good work.

An increasingly prominent feature of the work is that performed in connection with the clinics at the Miller Arcade, Barlow Street and the Open Air School, and upon the working of the new scheme for the supervision and treatment of crippled children.

During the year Nurse Singleton left the service to join the County Council School Medical Service, Miss Whitehead left on superannuation, and Nurses King and Pilkington were appointed in their stead. I also wish to place on record my sense of personal loss on the death of Alderman Snelham, whose close personal interest in the organisation has been of continual support and encouragement. The loyal and painstaking work of the Assistant School Medical Officers, Dental Surgeons, Nurses and Clerical Staff have rendered this report of progress possible. They deserve well of your Committee.

I am,

Your obedient Servant,

F. A. SHARPE,

Medical Officer of Health and School Medical Officer.

PUBLIC HEALTH DEPARTMENT,
TITHEBARN STREET,
PRESTON.

2.—CO-ORDINATION.

The Medical Officer of Health is the Superintendent School Medical Officer. Maternity and Child Welfare records of children reaching five years of age are passed on to the School Medical Service Department. There is constant interchange of information going on between the School Medical, Tuberculosis, Maternity and Child Welfare, and Public Health Departments.

3.—SCHOOL HYGIENE.

SANITARY CONDITION OF SCHOOLS.

There is nothing to alter in the general description in the sanitary condition of the schools given in the report for 1926, and that report is again put forward. The responsibility for repairs is partly one for the Committee, partly for the School Managers and partly a joint affair, but it appears to me that a careful study of the health conditions of the schools would well repay the time and energy of the Education Committee :—

" Most of the schools are in a satisfactory state of repair, but few of them are in keeping with modern ideas of school buildings.

In too many instances a large room is made to serve as a classroom for several classes, by the use of small movable partitions.

Cloakroom accommodation is usually rather inadequate, and in most cases no special provision is made for the drying of wet clothing.

Ventilation resolves itself too often into a choice between draughts and stuffiness, whereas in a perfect system neither inconvenience need be present. In many of the schools the movable part of the window which forms the means of ventilation is high up and inaccessible except by a length of window cord. If the window sticks or the cord breaks, the amount of ventilation is liable to be defective for an indefinite period.

The heating of the schools in nearly all cases is done by means of low pressure hot water systems, occasionally supplemented by open fires. In a few cases the boilers appear to be started too late in the day to have the schools adequately warmed by 9 a.m.

Closet and urinal accommodation leaves much to be desired, for apart from actual structural defects, the design of many of them is so antiquated and awkward that there can be no incentive to make or keep them clean and tidy. In most cases, however, the best use is being made of what facilities there are.

At the best of times the amount of sunshine finding its way into the classrooms is meagre, owing to the design of the schools and the proximity of other buildings. The trouble is accentuated in many instances by dirty windows, and windows of obscured glass where clear glass might be used. The more frequent cleaning of school windows is a matter requiring attention, with the knowledge that by so doing the health of the children would be definitely benefited.

Most of the schools have electric light. Gas has the double objection of giving a poorer light (with the fittings generally used) and the tendency for leakage to occur and vitiate the atmosphere.

Playground accommodation is far from satisfactory: in a few instances there is none at all. In others the size, surface, slope or drainage of the playground leaves much to be desired.

In cases where a school is used also for night classes, it is very desirable that thorough ventilation of the building be secured immediately the night classes conclude. This is a matter which is especially likely to be neglected, but which has important effects on the atmospheric condition of the school on the following day.

There are some very satisfactory school buildings in the area, and it is to be hoped that as funds are available some of the most objectionable of the present buildings will gradually be replaced."

The Director of Education informs me that during the year decorations and repairs have been carried out at the following schools :—

> St. Mark's C.E., St. Paul's C.E., Ribbleton Avenue Wesleyan, St. Jude's C.E., St. Wilfrid's R.C., St. Andrew's C.E. (Girls and Infants), Sacred Heart R.C., Moor Park Open Air School (part of), Marsh Lane Domestic Science Centre, Maitland Street Domestic Science Centre.

The number of schools, their accommodation and average attendance for the year are as follows :—

	Number of Schools.	Recognised Accommodation.	Average attendance for year ended 31st March, 1927.
Church of England	19	13478	6729
Roman Catholic	10	9682	5863
Nonconformist	6	2543	1965
Council	4	2450	1980
Total	39	28153	16537

The average attendance is 82 more than that of 1926, which was 311 more than that of 1925.

4.—MEDICAL INSPECTION.

Three age groups were examined during routine inspection during 1927. The entrants' group was not, as formerly, composed of children of five or six years of age only, but included all children in the infants' schools from the age of three upwards who had not previously been examined. The children in the intermediate group were seven to eight years old, whilst those in the leavers' group were 12 or over.

The following were the numbers in each group :—

Entrants, 2432; Intermediate, 1405; Leavers, 1792.

A table giving the numbers examined in each group during the last six years is as follows :—

	YEAR OF EXAMINATION.					
	1927	1926	1925	1924	1923	1922
Entrants	2432	2865	2157	1566	1509	1844
Intermediate ...	1405	2780	1404	1676	1951	2032
Leavers	1792	625	2070	1881	1809	1990
Totals	5629	6270	5631	5123	5269	5866

5.—FINDINGS OF MEDICAL INSPECTION.

The following paragraphs relate to the findings of the Medical Officers and Nurses at the routine inspections carried out at the schools.

(a) UNCLEANLINESS.

The number of children examined by the nurses for uncleanliness was 21,837, as compared with 18,565 last year. As one can readily understand, this branch of the nurses' work is by no means a pleasant one, and much tact is required, some mothers resenting keenly any adverse criticism regarding the cleanliness of their children. Now that girls' hair is worn short, there is certainly less excuse for neglect, but until housing conditions are remedied, there will always be a certain amount of uncleanliness to battle with.

The children examined were classified into the same groups as last year. The following figures show the result :—

	1927.		1926.	
	No.	%	No.	%
(1) Free from nits	15083	69.1	12343	66.4
(2) Few nits	3652	16.7	3835	20.6
(3) Many nits	2667	12.2	1963	10.7
(4) Severe nits	408	1.8	390	2.1
(5) Verminous	27	0.12	34	0.18
Total number examined ...	21837		18565	

No. examined during 1925, 19537. No. requiring attention, 2898=14.83%.
No. examined during 1926, 18565. No. requiring attention, 2387=12.85%.
No. examined during 1927, 21837. No. requiring attention, 3102=14.2 %.

There were 4,050 home visits paid by the nurses on account of uncleanliness during 1927, the number during 1926 being 2,731.

Fifteen children, because of uncleanliness, had special attention from the nurses at the School Clinic, compared with 17 in the previous year.

(b) MINOR AILMENTS.

Most of the minor ailments are noted by parents or teachers and are sent to the School Clinics, so that during routine inspections few are observed.

(c) TONSILS AND ADENOIDS.

There is usually from year to year a considerable difference in the number of children referred for treatment of enlarged tonsils and adenoids. This year, however, the number is the same as that of 1926, being 378.

Number in	1927	1926	1925	1924	1923	1922	1921
	378	378	453	297	278	208	148

(d) TUBERCULOSIS.

Two cases of suspected tuberculosis were found during routine inspection and were accordingly sent on to the Tuberculosis Dispensary. Only one such case was found during last year.

(e) SKIN DISEASE.

Very few cases of skin disease were noted during the year, there being only seven referred for treatment, as compared with 26 in 1926. There was, however, a decided increase in the number of cases attending the Minor Ailments Clinics, impetigo, as in other years, being the form of skin disease most frequently met with.

(f) EXTERNAL EYE DISEASE.

The number of children found suffereing from the above disease varies little from year to year, this year the number being 16, making a difference of one from 1926.

Figures for the last five years:—

1927	1926	1925	1924	1923
16	17	22	20	17

(g) VISION.

Taking into account special cases brought forward by teachers, the number of children found to have defective vision and referred for treatment was 559, compared with 627 in the previous year.

The following are the numbers for the last four years:—

1927	1926	1925	1924
559	627	638	651

The number of children examined in each of the two age groups tested, and the number of these found to have defective vision are given in the following table :—

	No. examined	No. referred for treatment	Percentage referred
Intermediate group—Boys	696	73	10.5
Girls	709	85	12.0
Leavers group—Boys	900	122	13.6
Girls	892	134	15.0

(h) EAR DISEASE AND HEARING.

There were 37 children noted during medical inspections who required treatment for ear disease or deafness, the number for the previous year being 31. Most of the children who suffer from ear disease attend one or other of the Clinics and from these are sent to the Infirmary should this at any time be found necessary.

The numbers for the last few years are :—

1927	1926	1925	1924	1923
37	31	56	56	41

(i) DENTAL DEFECTS.

The findings of the Dental Surgeon are included in Section 8, in page xxi.

(j) CRIPPLING DEFECTS.

An Orthopædic Clinic was inaugurated in October, 1926, in conjunction with the Lancashire County Council's orthopædic scheme. The Surgeon attends once a month and the Nurse once a week. The Clinic is held in the Open Air School, Moor Park. On the 31st December, 1927, there was a waiting list of 109 cases (59 boys and 50 girls) and new cases are put on the list as they are discovered.

A summary of the work of the clinic from its inception to 31st December, 1927, is given in the following tables :—

ORTHOPÆDIC CLINIC.

Number of sessions (October to December, 1927)—Surgeon and Nurse	3
Nurse only	5
New cases seen by Surgeon—Boys	18
Girls	17
Total	35
Old cases re-examined by Surgeon—Boys	5
Girls	6
Total	11

Attendances at Nurse's Session :—

	Boys	Girls	Total
For exercises	15	7	22
For instructions	6	2	8
Measured for splints, etc.	4	6	10
Miscellaneous	2	—	2
	27	15	42

Total attendances—	
October	14
November	37
December	37
	88

	Education Committee	Tuberculosis Committee	Maternity and Child Welfare Committee
New cases chargeable to	25	6	4
Old cases chargeable to	7	3	1
Weekly cases chargeable to	30	8	4
	62	17	9

New cases classified according to disability :—

Postural Kyphosis	1
Cleft palate	1
Poliomyelitis	6
Genu valgum and flat foot	1
Spastic Hemiplegia	3
Congenital talipes equino varus	5
Suppurative arthritis of hip	1
Old fractured forearm	1
Congenital dislocation of hip	2
Scoliosis	2
Erb's paralysis	3
Spastic paraplegia	1
Old fractured elbow	1
Congenital absence of fibula	1
Tuberculosis of spine, elbow and shoulder	1
Tuberculosis of hip	2
Tuberculosis of spine	3
Total	35

The clinic promises to be a most useful feature of the School Medical Service. The treatment of these cases is prolonged, expensive and difficult. Immense importance is therefore attached to two cardinal points, firstly, cases must be obtained early so that remedial measures can be brought to bear when the condition is most likely to yield to treatment and, secondly, the parents, particularly the mothers, must be educated to the realisation of the essential need for their intelligent co-operation with the Surgeon in his work. A voluntary after-care committee has been formed by the Preston Ladies' Voluntary Workers' Association to assist the mothers who need help in the treatment of their crippled children. The evidence of a voluntary interest in their children will probably stimulate some of the mothers to attend the clinic more readily and more regularly than they might otherwise do.

6.—INFECTIOUS DISEASE.

Under the system in operation in the Borough it is the duty of the Head Teacher to report the occurrence of and the suspected occurrence of infectious diseases among the scholars to the Medical Officer of Health. The cases are visited by the staff of the Medical Officer of Health and the results of these visits transmitted through the Director to the Head Teacher. Information as to the period of necessary exclusion and the actual cause of absence in suspected cases is also given. Daily information collected from the records of the Sanitary Inspectors, Health Visitors, Tuberculosis Nurses and School Nurses is prepared and collated with the information in possession of the School Attendance Officers. The following table shows how the different schools were affected.

A severe epidemic of measles swept the town in the spring months. Following a year of low prevalence an increase in the number of cases was noticed in December, 1926 (27 cases). This number was doubled in January and was equal to six per day in February. There averaged 26 cases per day in March and the epidemic broke out with almost explosive violence in April, when 1,260 cases were reported from various sources. The following two months saw a rapid decline, 859 and 145 cases respectively, after which only occasional cases were notified. Of the total 3,344 cases, 853 were notified by head teachers and a vast number of secondary cases arising out of these were discovered on the visits of the Health Visitors.

Whooping Cough was more prevalent than in 1926, whereas chicken-pox and mumps were much less in evidence.

There were over a thousand cases of influenza and colds reported.

The loss to school attendance from these infectious diseases is very great but I think is kept to a minimum by the reporting to the Director of Education of the probable date of return to school and the supervision of the illness by the Nurses.

School closure was not resorted to in any instance. Certificates to the effect that the attendance had sunk to 60 per cent. and below on account of illness was given in the following schools :—

Schools.	Date.	Disease.
St. Matthew's Infants'	Week ending Jan. 28th	Influenza
St Cuthbert's Infants'	,, ,, ,, ,,	,,
All Saints' Infants'	,, ,, ,, ,,	,,
Emmanuel Infants'	,, ,, ,, ,,	,,
St. Michael's	,, ,, Feb. 4th	,,
Grimshaw Street Infants'	,, ,, ,, ,,	,,
St. Matthew's Branch	,, ,, ,, ,,	,,
Ribbleton Avenue Infants'	,, ,, ,, ,,	,,
Roebuck Street Infants'	,, ,, ,, ,,	,,
Eldon Street Infants'	,, ,, ,, ,,	,,
St. Andrew's Infants'	,, ,, ,, ,,	,,
St. Cuthbert's Infants'	,, ,, ,, ,,	,,
St. Mary's R.C. Infants'	,, ,, ,, ,,	,,
Emmanuel Infants'	,, ,, ,, ,,	,,
Moor Park Wes. Infants'	,, ,, ,, ,,	,,
English Martyrs' Infants'	,, ,, ,, ,,	,,
St. Mary's St. Wes. Infants'.	,, ,, ,, 11th	,,
St. Andrew's Infants'	,, ,, ,, ,,	,,
St. Cuthbert's	,, ,, ,, ,,	,,
Ashton Wesleyan Infants'	,, ,, ,, ,,	,,
Sacred Heart	,, ,, ,, ,,	,,
St. Mary's R.C. Infants'	,, ,, ,, ,,	,,
St. Cuthbert's Infants'	,, ,, ,, 18th	,,
St. Mary's R.C. Infants'	,, ,, ,, ,,	,,
St. Augustine's Infants'	,, ,, March 4th	Measles
St. Augustine's Infants'	,, ,, ,, 11th	,,
St. Augustine's Infants'	,, ,, ,, 18th	,,
St. Michael's Infants'	,, ,, ,, ,,	,,
Holy Trinity Infants'	,, ,, ,, ,,	,,
St. Michael's Infants'	,, ,, ,, 25th	,,
Holy Trinity Infants'	,, ,, ,, ,,	,,
English Martyrs' Infants'	,, ,, April 1st	,,
St. Ignatius' Infants	,, ,, ,, ,,	,,
Grimshaw Street Infants'	,, ,, ,, 15th	,,
St. Mark's Infants'	,, ,, ,, ,,	,,
St. Stephen's Infants'	,, ,, ,, ,,	,,
Grimshaw Street Infants'	,, ,, ,, 29th	,,
Sacred Heart Infants'	,, ,, ,, ,,	,,
St. Mark's Infants'	,, ,, ,, ,,	,,
Sacred Heart Infants'	,, ,, May 6th	,,
Deepdale Council Infants'	,, ,, ,, 13th	,,
St. Matthew's Branch	,, ,, ,, 20th	,,
St. Mary's St. Wes. Infants'.	,, ,, ,, ,,	,,
Ribbleton Avenue Infants'	,, ,, ,, ,,	,,
St. Cuthbert's Infants'	,, ,, ,, ,,	,,

TABLE A.

Cases of Infectious Disease Reported by Head Teachers.

School.	Scarlet Fever	Measles	Whooping Cough.	Diphtheria.	Chicken Pox.	Mumps.	Ringw'rm Eczema, Sore Eyes Heads, &c.	Influenza.
Parish Church	...	...	...	...	...	...	...	..
St. James'	...	...	...	...	...	...	...	...
St. Augustine's	...	132	1	...	2	1	...	7
St. Saviour's	...	5	...	...	1	1	...	...
Grimshaw Street	...	13	...	...	...	1	...	24
St. Stephen's	...	37	3	...	...	2	6	114
Christ Church	...	3	...	...	...	...	...	...
Hincksman Memorial	...	3	...	...	...	...	...	11
St. Mary's R.C.	...	18	2	...	...	...	...	32
St. Wilfrid's	...	1	1	...	...	1	...	...
St. Michael's	...	34	...	...	1	...	...	21
Sacred Heart	...	14	2	...	1	...	...	...
Ashton Wesleyan	...	7	6	...	1	2	3	30
St. Andrew's	...	48	1	...	...	8	...	138
Roebuck Street Council	...	...	5	...	1	16	2	196
St. Walburge's	1	33	26	1	...	5	...	1
St. Mark's	...	9	3	...	2	1	...	9
St. Peter's	...	4	1	...	1	2	...	...
Emmanuel	...	3	1	...	5	4	...	156
St. Cuthbert's	...	20	8	...	2	...	...	28
Eldon Street Council	...	5	8	...	2	...	...	85
Moor Park Wesleyan	...	...	10	...	2	...	...	...
English Martyrs' Elementary	...	109	17	...	...	...	...	39
St. Jude's	...	24	13	...	7	...	...	...
Deepdale Council	...	48	1	...	7	3	2	93
St. Paul's	...	...	1	...	...	1	...	...
St. Ignatius' Elementary	...	56	3	...	1	1	...	...
All Saints'	...	13	15	...	5	1	2	...
Holy Trinity	...	21	...	...	...	1	...	...
Orchard U.M.F C.	...	2	3	...	...	...	...	...
St. Luke's	1	...	5	...	...	1	...	60
St. Joseph's	...	52	...	...	...	...	...	...
St. Matthew's	...	9	5	...	21	2	...	...
St. Matthew's Branch	...	34	5	...	1	...	2	23
Ribbleton Avenue	...	36	...	...	2	...	...	...
St. Mary's National	...	...	...	...	...	...	...	...
St. Mary's Street Wesleyan	...	32	1	...	...	...	...	53
St. Thomas's	...	18	...	...	9	...	...	...
Open Air School	...	3	1	...	1	1	...	12
St. Gregory's	...	7	...	...	...	...	...	...
	2	853	148	1	75	55	17	1132
SECONDARY SCHOOLS.								
Park Secondary School	...	5	...	...	...	...	...	...
Catholic Convent	...	...	...	...	...	...	...	...
Catholic College	...	...	...	...	...	...	...	...
Preston Grammar School	...	...	...	...	...	...	...	...

7.—FOLLOWING UP.

The following up of individual cases of defect is a matter of close co-ordination between the School Medical Officer, the parents and the family doctor. The school nurse and the school teacher have a very important share in this work, and thanks are due to them for the skilful and painstaking manner in which they carry out their duties. Every case of defect is followed up until the defect is remedied, or until it becomes evident that the parent is determined to take no action. In the latter event, if the neglect of the defect amounts to obvious injury to the child, the case is handed over to the N.S.P.C.C. It is gratifying to know that by far the larger number of our following-up cases end in the defect being remedied without undue pressure.

VISITS OF NURSES TO CHILDREN FOUND DEFECTIVE.

	1924	1925	1926	1927
Home visits	3714	3265	3746	4050
Home visits re cleanliness of head	2972	2539	2731	3275
Children inspected re cleanliness of head ...	21308	19537	18565	21837
School visits	315	112	97	112

8.—MEDICAL TREATMENT.

The medical treatment carried out by the School Medical Service includes the treatment of defective vision, enlarged tonsils and adenoids, ear disease, minor ailments and conditions which are dealt with in the following paragraphs.

(a) MILLER ARCADE INSPECTION CLINIC.

Defect.	On Books, 1st Jan. 1927.	New Cases.	Dis-charged.	Left on the Books 31st Dec., 1927.
Malnutrition	30	61	62	29
Uncleanliness—Head	1	4	3	2
,, Body	1	...	...	1
Skin Disease	8	156	149	15
Eye	5	314	316	3
Ear	12	118	107	23
Nose and Throat	16	174	169	21
Enlarged Glands	...	78	72	6
Defective Speech	...	3	3	...
Teeth	1	28	27	2
Heart and Circulation	8	28	23	13
Lungs	26	116	105	37
Tuberculosis—Pulmonary ...	15	19	20	14
,, Non-Pulmonary ...	9	15	13	11
Nervous System	10	24	22	12
Deformities	8	10	9	9
Other Defects	27	675	653	49
Total	177	1823	1753	247

(b) BARLOW STREET INSPECTION CLINIC.

Defect.	On Books, 1st Jan. 1927.	New Cases.	Dis-charged.	Left on the Books 31st Dec., 1927.
Malnutrition	2	8	9	1
Uncleanliness—Head	...	1	1	...
,, Body	...	...	...	...
Skin Disease	5	122	104	23
Eye	2	104	105	1
Ear	7	90	93	4
Nose and Throat	7	81	78	10
Enlarged Glands	...	36	36	...
Defective Speech	...	...	...	...
Teeth	...	1	1	...
Heart and Circulation	8	25	21	12
Lungs	1	40	38	3
Tuberculosis—Pulmonary ...	1	3	1	3
,, Non-Pulmonary ...	2	6	7	1
Nervous System	4	14	11	7
Deformities	...	5	5	...
Other Defects	10	286	272	24
Total	49	822	782	89

(c) OPEN AIR SCHOOL INSPECTION CLINIC.

Defect.	On Books, 1st Jan. 1927.	New Cases.	Dis-charged.	Left on the Books 31st Dec., 1927.
Malnutrition	...	...	...	...
Uncleanliness—Head	...	...	...	...
,, Body	...	...	...	...
Skin Disease	...	18	18	...
Eye	...	4	4	...
Ear	2	3	4	1
Nose and Throat	...	1	1	...
Enlarged Glands	...	...	...	...
Defective Speech	...	...	...	...
Teeth	...	...	...	...
Heart and Circulation	...	2	2	...
Lungs	1	...	1	...
Tuberculosis—Pulmonary ...	...	...	...	...
,, Non-Pulmonary ...	2	1	3	...
Nervous System	...	...	...	...
Deformities	...	...	...	...
Other Defects	2	9	10	1
Total	7	38	43	2

Total attendances for the last five years :—

	Miller Arcade Clinic.	Barlow Street Clinic.	Open Air School	Total.
1927	4123	2138	145	6406
1926	4422	2280	...	6702
1925	...	...	...	6023
1924	...	...	...	4920
1923	...	...	...	4450

(a) MINOR AILMENTS.

The treatment of minor ailments is an important part of the work of the school nurses. The methods employed have to be chosen with a view to interfering with school attendance as little as possible, especially in such matters as the elimination of unsightly dressings and bandages. Considerable ingenuity is called for, and the nursing staff deserves great credit for the highly efficient manner in which they discharge these duties. Details of the work of the minor ailments treatment clinics are given below.

MINOR AILMENTS TREATMENT CENTRES, 1927.

(a) MILLER ARCADE.

Defect.	On Books, 1st Jan. 1927.	New Cases.	Dis-charged.	Left on the Books 31st Dec., 1927.
Skin :				
Ringworm, Scalp and Body	7	91	95	3
Scabies	...	7	7	...
Impetigo	22	518	523	17
Other Skin Diseases ...	3	37	36	4
Minor Eye Defects :				
External and other, but excluding cases falling in Table IV, Group I.	11	264	263	12
Minor Ear Defects	35	176	175	36
Miscellaneous (*e.g.*, Minor Injuries, Bruises, Sores, Chilblains, etc.)	72	1437	1485	24
Total	150	2530	2584	96

(b) BARLOW STREET.

Defect.	On Books, 1st Jan. 1927.	New Cases.	Dis-charged.	Left on the Books 31st Dec., 1927.
Skin :				
Ringworm, Scalp and Body	...	46	31	15
Scabies	...	...	...	...
Impetigo	...	101	96	5
Other Skin Diseases ...	...	23	23	...
Minor Eye Defects :				
External and other, but excluding cases falling in Table IV., Group I.	...	43	41	2
Minor Ear Defects	11	52	53	10
Miscellaneous (*e.g.*, Minor Injuries, Bruises, Sores, Chilblains, etc.)	18	582	583	17
Total	29	847	827	49

(c) OPEN AIR SCHOOL.

Defect.	On Books, 1st Jan. 1927.	New Cases.	Dis-charged.	Left on the Books 31st Dec., 1927.
Skin :				
Ringworm, Scalp and Body	1	12	13	...
Scabies	...	...	...	...
Impetigo	2	34	36	...
Other Skin Diseases	1	7	8	...
Minor Eye Defects :				
External and other, but excluding cases falling in Table IV., Group I.	2	14	14	2
Minor Ear Defects	8	20	22	6
Miscellaneous (*e.g.*, Minor Injuries, Bruises, Sores, Chilblains, etc.)	7	137	132	12
Total ...	21	224	225	20

NEW CASES AND ATTENDANCES DURING LAST FIVE YEARS.

	Miller Arcade		Barlow Street		Open Air School		Total	
	New Cases	Attendances	New Cases	Attendances	New Cases	Attendances	New Cases	Attendances
1927	2530	30207	847	10155	224	4801	3601	45163
1926	2291	27494	760	8431	183	5371	3234	41296
1925	...	...	...	...	...	...	2653	33488
1924	...	...	...	...	...	...	2632	32233
1923	...	...	...	...	...	...	2092	31625

(b) TONSILS AND ADENOIDS.

Children suffering from this condition are referred to the Preston Royal Infirmary for treatment, which is provided by the Education Committee. The number operated upon is much larger than the number referred (from the routine inspections at the schools—378) as a large waiting list had accumulated owing to alterations and consequent closing of the children's ward at the Infirmary. The appointment of an additional surgeon enabled the large amount of extra work to be satisfactorily carried out.

	1923	1924	1925	1926	1927
No. referred to Preston Royal Infirmary for treatment	321	303	395	504	530
No. operated on at Preston Royal Infirmary	272	284	276	461	531

(c) TUBERCULOSIS.

The diagnosis and treatment of tuberculosis and suspected tuberculosis continues to be carried out by the Borough Tuberculosis Officer, to whom these cases are referred by the School Medical Officers. The number so referred in 1927 was 38 and the number diagnosed as actively tuberculosis was 10.

(d) SKIN DISEASE.

The treatment of these diseases is referred to in the tables dealing with the Minor Ailments Treatment Centre. Ringworm seems to be a little more prevalent. There were at the end of 1926 eight cases of this disease on the books; 149 new cases attended, 139 were discharged cured, leaving 18 at the end of the year. The corresponding figures for impetigo during 1927 were 24, 653, 655 and 22.

Every effort is made to combine adequate treatment with the minimum loss of school time.

(e) EXTERNAL EYE DISEASE.

Blepharitis and styes are the principal diseases met with under this heading. The number of cases of external eye disease treated during the past five years is given in the following table :—

	1923	1924	1925	1926	1927
Number of cases	224	254	241	228	341

(f) VISION.

The refraction work of the School Medical Service is carried out at one of the clinics, as reported last year. The number of cases dealt with in 1927 is as follows :—

	1926 (6 mths.)	1927
A.—Attendances by appointment.		
No. of sessions	60	126
No. of appointments made	521	988
No. of appointments kept	479	885
Percentage of appointments kept	92	90
No. of refractions carried out by appointment	458	837
No. of prescriptions for glasses	331	561
Percentage of children examined requiring glasses	72	67
B.—Casual Attendances.		
No. of casual attendances	293	948
(a) Submitted to refraction	57	71
(b) Glasses prescribed	37	117
(c) Glasses for verification	224	536
(d) Glasses for review	—	120
(e) Other Cases	17	182
C.—Average attendances per Session.		
(a) New cases for refraction	8	7
(b) Casual attendances	5	7½

During the year 917 children were submitted to refraction under the Authority's arrangement, 24 were examined by private practitioners, and 25 by opticians, making a total of 966. The corresponding figures for 1926, being 975, 36, 37 and 1048.

714 Children were given prescriptions for spectacles and 595 obtained them. The Education Committee provided glasses in 51 instances.

(g) EAR DISEASE AND HEARING.

Ionisation Treatment of Otorrhœa.—In last year's report the opinion expressed regarding the value of ionisation in cases of otorrhœa (based on a small series of 24 cases) was that this procedure is a useful means of completing the treatment of otorrhœa after other ordinary methods have brought the ear into a reasonably clean condition.

In a few cases the experiment has been tried of using ionisation as a means of cleaning up a dirty, discharging ear, but without any success. The necessity for bringing the ear into such a state that the discharge is clear and watery before attempting to ionise, has the result of reducing the number of cases available for ionising to a comparatively small figure.

Besides the usual positive ionisation with zinc, negative ionisation with iodine has been tried—using both collosol iodine and potassium iodide. In no case did this negative ionisation appear of benefit.

In other cases a combination of douching and ionising was tried, the douche liquid being connected to one electrode of the ionising system. This method appeared to bring about a cure in a few cases, but the impression gained on the whole was that the ordinary zinc ionisation gave better results than these modifications. It is not possible to show separate results for the different forms of treatment, as in some casces two or more forms were used concurrently or alternately.

The following table gives a summary of the cases treated at the Barlow Street Clinic in 1927 :—

CASES OF OTORRHŒA ATTENDING BARLOW STREET CLINIC IN 1927.

On the books, 1st January, 1927	13
New cases	50
Discharged—cured	50
not cured	6*
Remaining on the books, 1st January, 1928 ...	7
No. treated during 1927	63
No. who received ionisation	26
No. of ionisings, including repetitions	43

Of the 63 cases treated, 50 were discharged cured within the year = 79%
Of the 26 cases ionised, 19 ,, ,, ,, ,, = 73%
Of the 37 cases not ionised, 31 ,, ,, ,, ,, = 84%

Relapses :—
No. of relapse cases (6)—4 after cure without ionisation.
2 after cure with ionisation.
No. of relapses cured again within the year—4 (all without ionisation).
Average duration of cure in these 4 cases—23 days.

In the 26 cases ionised, the average period of preparation before ionising was 53 days, and in the 19 cases cured the average duration of treatment between the final ionising and discharge was 69 days. The complete period of treatment in the 19 cured cases averaged 158 days. The complete period of treatment in the 31 cases cured without ionisation averaged 33 days. It is noteworthy that this figure is much less than the preparation period of the ionised cases. Evidently the cases ionised were of a very chronic type. The average duration of treatment in the 50 cases discharged cured was 80 days. In all these cases the preliminary treatment was substantially the same, the object being to bring the ear into a clean condition by means of douching, so that ionising could be performed. Actually in 31 of the cases by the time the ear was cleansed, healing occurred without further measures.

In the 19 ionised cases cured, seeing that the discharge persisted for 69 days after the final ionising, and seeing that the ear could originally be brought into

---

*Cases discharged not cured :—
1 left town after 42 days' treatment.
1 left school after 84 days' treatment.
1 left school after 105 days' treatment.
1 transferred to Infirmary after 53 days' treatment.
1 discharged after 126 days for home treatment.
1 discharged after 346 days for home treatment.

a clean condition in 53 days, it may be doubted whether the duration of treatment has been materially shortened by the ionising. Indeed it might be argued that the fact of ultimate cure was due more to the treatment received before and after ionising than to the ionising itself. An impartial survey of the facts seems to suggest that ionising as carried out by us (without intra-tympanic irrigation) has no marked effect on the course of otorrhœa.

Unfortunately there are a number of cases of otorrhœa which seem to resist all methods of treatment, and which are regretfully discharged uncured after a long period of attendance. When it has become evident that the case is not responding in the least to any form of treatment, the loss of educational time caused by attendance at clinic and hospital appears to be a greater disadvantage than the educational loss caused by the otorrhœa and accompanying ill-health. In such cases it seems wiser to discontinue all treatment except such as can be carried out in the home.

(h) DENTAL DEFECTS.

The number of children submitted for routine dental inspection was 5,233, as compared with 4,224 in 1926. Of these, 2,696 were found to require treatment, a percentage of 51.5 as compared with 47.2 in 1926. Among those found to require treatment 1,763 actually received it, a percentage of 65.4, compared with 1,241 and a percentage of 66 in 1926.

In addition to these routine groups 2,059 " casual " children attended. A " casual " is a child who attends for some dental emergency, i.e., toothache or abscess. They are mostly children of the older age groups not as yet included in the scheme, and also comprise those children who have been examined but have refused treatment. Although a number of children already in the scheme and undergoing annual treatment and re-treatment present themselves as casuals, it is very rare for them to do so in respect of the permanent teeth. The dental emergency in these children always relates to the milk or temporary teeth which are not treated in our scheme, except where necessary by extraction. The casuals supply the bulk of the extraction and gas cases.

In recent years, 1922-1926, the casuals have numbered 828, 952, 1,067, 1,134 and 1,593 respectively. The immense increase of work in connection with both the routine groups of the scheme and with the casuals is apparent. Since July of the year under review, we have had the advantage of the services of the school nurses in the dental " follow-up " work, which is now shewing results in an increased number of treatment acceptances. The statistical result, however, is not seen in this year's report but will show up favourably next year. Up to the present the " refusals " are as follows: aged 6, 30%; aged 7, 20.5%; aged 8, 29%.

During the year each school was visited and all new children aged six were inspected, and those who had been previously inspected and treated, now in age group 7 and 8, and partly those now in age group 9 years, were re-inspected, with the following results; 32.6% of those aged six, 58.6% of those aged seven, and 65.1% of those aged eight required treatment (including 379 of those aged seven, eight and nine who had received treatment in a previous year and required re-treatment). It is seen here that the ages seven and eight are the two groups where

ANNUAL REPORT OF THE DENTAL SURGEONS

For the Period January 1st to December 31st, 1927.

SCHOOLS VISITED	Number of Children Examined at School	No Treatm't Required	Number requiring Treat-ment.	Number accepted Treat-ment.	Number refused Treat-ment.	Own Dentist.	Particulars of Attendances and Work at Dental Clinic.					
							Number attended Clinic	No. of Actual Attend-ances at Clinic	No. of Teeth Extracted	No. of Stoppings	No. of Dressings	No. of Scalings
St. Matthew's	...	...	...	...	...	...	1	2	...	4	...	...
Ribbleton Avenue Wesleyan	...	...	...	...	...	...	...	5	...	10	...	...
St. Mary's Street Wesleyan	...	...	...	...	...	...	2	18	...	28	6	...
St. Joseph's	...	...	...	...	...	...	83	288	2	465	192	...
St. Ignatius	382	195	187	134	33	20	122	437	2	686	215	...
St. Saviour's	100	58	42	22	17	3	19	51	3	109	37	...
St. Augustine's	261	134	127	116	9	2	98	349	95	656	143	1
St. Thomas'	163	88	65	54	11	10	61	166	4	261	84	...
Grimshaw Street	130	40	90	58	21	11	43	161	90	309	138	1
English Martyr's	292	160	132	81	40	11	127	255	1	234	79	...
Parish Church	132	32	100	83	1	16	81	204	82	427	25	...
Christ Church	146	48	98	78	14	6	72	154	143	359	...	...
Moor Park Wesleyan	159	93	66	38	5	23	35	121	1	190	48	...
St. Paul's...	116	28	88	73	11	4	76	171	110	394	3	...
Orchard Street	58	22	36	25	2	9	21	42	21	78	1	...
Emmanuel	222	140	82	55	7	20	50	148	...	263	51	...
All Saints'	115	25	90	76	7	7	70	173	156	322	2	...
Eldon Street Council	113	73	40	35	3	2	30	97	1	152	35	...
St. Wilfrid's	70	28	42	35	5	2	39	82	61	157	3	...
Holy Trinity	39	18	21	18	1	2	20	43	28	103	...	...
Roebuck ...	172	99	73	48	13	12	48	124	1	232	35	...
Ropers ...	69	24	45	40	4	1	40	95	82	197	2	...
St. Peter's	135	54	81	65	11	5	64	178	80	345	11	...
St. Mary's R.C. ...	73	34	39	35	3	1	39	101	71	183	4	...
St. Gregory's	76	45	31	22	3	6	19	52	1	78	16	...
Talbot ...	300	123	177	101	53	23	90	236	75	453	30	...
St. Stephen's	115	55	60	38	9	13	31	86	67	209	14	...
St. Jude's	119	66	53	46	3	4	46	124	6	194	38	...

St. Cuthbert's	39	18	21	12	...	9	17	35	...	44	11	...
St. Andrew's	228	111	117	63	44	10	57	122	64	254	18	...
Deepdale Council	345	197	148	91	6	51	87	218	1	376	58	...
St. Mark's	106	48	58	38	15	5	43	87	56	169	19	...
Hincksman	135	81	54	46	6	2	40	97	26	206	24	...
St. Mary's C.E.	140	75	65	48	17	...	20	20	6	23	9	...
Ashton Wesleyan	82	42	40	26	4	10	24	40	15	71	8	...
Sacred Heart	100	46	54	24	18	12	18	25	16	37	7	...
St. Matthew's	287	168	119	90	12	17	...	...	...	...	...	...
Open Air, Physical Defectives ...	136	56	80	80	...	...	30	92	2	149	22	...
Open Air, M. D. Special ...	78	13	65	65	...	...	...	...	...	...	...	...
Routine Group Totals ...	5233	2537	2696	1959	408	329	1763	4699	1369	8427	1388	2
Casuals Examined at Dental Clinic	2059	...	2059	2059	...	...	2059	2316	3118	1921	256	6
Total 1927	7292	2537	4755	4018	408	329	3822	7015	4487	10348	1644	8
TOTALS ... 1926	5817	2230	3587	3034	261	292	2834	6280	1977	7735	2777	9
do. ... 1925	2781	715	2066	1779	53	234	1718	4078	1006	4939	1537	44
do. ... 1924	2534	637	1897	1649	87	161	1578	3554	1021	3898	1110	35
do. ... 1923	2511	627	1884	1669	54	161	1551	3504	950	3738	1374	59
do. ... 1922	2539	719	1820	1578	86	156	1539	3595	926	3786	1570	35
do. ... 1921	2918	1047	1871	1570	42	259	1493	3760	731	3783	1909	15
do. ... 1920	2597	1066	1531	1365	31	112	1334	3515	433	3047	3159	8
do. ... 1919	1939	870	1069	986	26	34	1052	2442	497	1976	2238	4
do. ... 1918	2657	171	1486	1278	102	54	1287	1976	437	2035	1650	12
do. ... 1917	2354	353	1470	1268	103	72	1116	2044	683	1301	1762	43

the work is heaviest, and the age nine group is the lowest. In the casuals also this is apparent, as the six year old molars have either been filled or extracted. Should these teeth have remained sound, they seldom decay afterwards.

During the year the number of treatments has much increased and also the number of extractions under gas. The gas administrations numbered 631, as against 434 in 1926. The number of casuals is increasing, and will probably continue to do so for a year, after which we expect a slight and gradual diminution. Should this not happen, we may find it necessary to restrict the number attending.

Another point worthy of attention is that a certain number of children are inspected at the various ages, and either persist as " refusals " of treatment, or accept treatment a year or so later when the dentition has become, so to speak, a total wreck. This involves, in any case, much wasted effort in following up, and in the event of the child accepting treatment at a later stage, much more work for the dental surgeon. Our scheme is one for the prevention, by annual inspection and treatment, of dental caries, and should not be regarded as a hospital for the treatment of advanced dental disease.

(i) SPEECH DEFECTS.

There is no special provision for the treatment of these cases.

9.—OPEN AIR EDUCATION.

(a) PLAYGROUND CLASSES.

There are no playground classes in this area.

(b) OPEN AIR SCHOOL.

The work of the school was discussed in detail in last year's report, and it is unnecessary to deal further with its ordinary aspects. Two new items may be mentioned—the fact that an orthopædic clinic has been established at the school, and the fact that sanction has been given by the Ministry of Health to the installation of artificial sunlight apparatus at the school. The latter matter is now in process of establishment. Among the many reasons for choosing the Open Air School as an orthopædic centre, special reference may be made to three :—1st : The fact that it is proposed ultimately to make arrangements for the education of seriously crippled children at the Open Air School, and they will then be under the direct supervision of the orthopædic and school nurses. 2nd : The fact that many of our crippled children are already in attendance at the Open Air School; and 3rd : The fact that there is convenient accommodation for the clinic in the school. A summary of the work of the clinic is given in paragraph 5(j), page ix.

Already the clinic has given clear evidence of its usefulness and popularity. We feel sure it is a branch which will add considerably to the prestige of the School Medical Service.

The normal activities of the Open Air School are summarised in the following tables.

OPEN AIR SCHOOL, 1927.

	Boys	Girls	Total
No. on Books, Jan. 1st, 1927	57	73	140
No. on Books, 31st Dec., 1927	70	61	131
No. Admitted during year	67	62	129
No. Discharged during year	64	74	138
Average No. on Roll	74	74	148
Average Attendance	62	57	119
Average Period of Attendance of those Discharged in 1927	...	...	1 year 4 mos.

ANALYSIS OF ADMISSIONS.

	Boys	Girls	Total
Anæmia	8	6	14
Asthma	...	1	1
Bronchitis	12	7	19
Cardiac	5	5	10
Chorea	3	4	7
Debility	19	23	42
Diarrhœa	2	...	2
Headache and Vertigo ...	4	3	7
Pre-T.B.	10	5	15
Rheumatism	...	4	4
T.B. Bronchial Glands ...	1	1	2
T.B. Cervical Glands	3	1	4
T.B. Spine	...	2	2
All Causes	67	62	129

ANALYSIS OF DISCHARGES.

Reasons for Discharge.	Boys	Girls	Total
Fit to attend former School	38	36	74
Unfit to attend any School	8	8	16
Over School Age : (*a*) Fit	5	19	24
(*b*) Under T.O.	1	1	2
Removed by Parent	10	10	20
Left the District	1	...	1
Died	1	...	1
All Causes	64	74	138

Percentage of leavers classified as "fit" :—

1927	71%
1926	60%
1925	55%

SCHOOL BATHS.

	Boys	Girls	Total
Open-Air School	2236	2053	4289
Special M.D. School	1752	1364	3116

CLINIC ATTENDANCES.

Number of children attending Medical Inspection Clinic	1,009
Average daily attendance at Minor Ailments Treatment Clinic	26
Total attendances at Minor Ailments Treatment Clinic	4,081

In addition to these attendances made by Open Air School children there were 865 attendances made by children attending St. Gregory's and Deepdale Council Schools.

As regards the after history of children who have attended the Open Air School, it might be thought that a comparison of such information with that of children from ordinary schools would yield results of considerable value. It is true that if the same type of child were dealt with in each case, then a comparison of the after histories of those who at some time attended the Open Air School with the after histories of those who attended only Public Elementary Schools might indicate some advantage attributable to the Open Air School. The figures for such a comparison, however, are not available, and any difference which might be noted if a comparison were made could only be attributed to the different types of children dealt with. Moreover, it is to be remembered that a child remains at the Open Air School for only a year or so out of its entire school life—a fact which renders a useful comparison all the more difficult. However, an effort has been made to trace every child who has left the Open Air School at the age of 14 since the school opened, and the present physical and occupational conditions are given below, so far as it has been possible to ascertain them. The total number of children so discharged = 118.

CHILDREN DISCHARGED FROM THE OPEN AIR SCHOOL AT THE AGE OF 14, SINCE THE SCHOOL OPENED IN 1919.

Present Occupational State.		Present State of Health.	
Number now at work	106	Number now in good health	77
,, unemployed	8	,, ,, fair health	33
,, dead	3	,, ,, poor health	4
,, not traced	1	,, dead	3
		,, not traced	1
Total	118	Total	118

Rough Classification of present Occupational States.

	Boys	Girls	Total
Cotton Trade	9	40	49
Engineering Trades	5	...	5
Other Skilled Trades	11	9	20
Shop Assistants	4	...	4
Farming and Dairying	2	1	3
Unskilled Labour	12	13	25
Total	43	63	106

Enquiry was made as to any special illness which has occurred since leaving school: the result is tabulated below, no individual being classified under more than one heading :—

Illnesses since leaving School.

Bronchitis	9
Colds	4
Pneumonia	1
Pleurisy	1
Under T.B. Officer ...	3
Sore Throat	5
Appendicitis	1
Influenza	4
Anæmia	4
Biliousness...	2
Chorea	1
Cardiac Disease	1
Rheumatism	2
Dead	3
Total	41

The table shows that 35% of the leavers have had some illness of note, bronchitis and other chest affections being the principal causes.

The high proportion of Open Air School leavers now in actual employment (90%) is worthy of note.

10.—PHYSICAL TRAINING.

Except in the cases of the Secondary Schools the physical training of the school children was again undertaken by teachers who had no special qualifications for the work, but until each school can have its own gymnasium, the want of special instructors is not as imperative as it then would be.

11.—PROVISION OF MEALS.

There were three centres engaged in providing free meals during the year for the poorer children. Mid-day meals were provided, the number being 41,078, the number in 1926 being 56,226 and in 1925 52,645. The number of children attending was 338, as compared with 431 during last year.

The Roebuck Street Centre was closed on the 19th February, 1927.

The particulars in regard to the distribution of the numbers in the three centres are seen in the following table :—

Centre	No. of Meals supplied	No. of Children
Marsh Lane	11,188	93
Glover's Court	29,386	215
Roebuck Street	505	30
	41,079	338

12.—SCHOOL BATHS.

The number of attendances of school children at the various swimming baths was very much lower during 1927 than in the previous year. Probably the cold, cheerless weather had something to do with this result. One can only hope that next year will see a return to more satisfactory conditions.

Last year there were 10,002 attendances by boys and 6,535 by girls, whilst this year there were only 6,539 by boys and 5,586 by girls.

Number of attendances at each of the swimming baths :—

Baths	Boys	Girls
Saul Street	4,518	4,039
Moor Park	960	1,182
Waverley Park	772	—
Haslam Park	289	365
Total	6,539	5,586

13.—CO-OPERATION OF PARENTS.

The parents' interest in the School Medical Service continues to be most in evidence at the school clinic (especially the special clinics, e.g., orthopædic and refraction), and least at the routine school inspections. Until the schools can provide accommodation specially designed for medical inspection work, it will not be possible to urge the attendance of parents in greater numbers, although their presence is generally very helpful.

14.—CO-OPERATION OF TEACHERS.

Thanks are again due to the teachers for the willing and able help which they give to further the work of the School Medical Service. Many cases of defective eyesight would escape attention, were it not for their observation. One is also grateful to them for their courtesy and kindness during routine inspections which must quite unavoidably cause a certain amount of dislocation of their work.

15.—CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

On account of their very varied duties the School Attendance Officers assist the school medical work at many points. Needless to say, they have worked heartily and well in the interests of the children.

16.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

Blind (including partially Blind) attending Certified Schools	Blind Home, Fulwood	2 Boys.
	Do. do.	6 Girls.
	Do. Liverpool ...	1 Boy.
Deaf and Dumb attending Certified Schools	Royal Cross School, Preston	6 Boys.
	Do. do. ...	3 Girls.
	Boston Spa	2 Boys.
	Do.	1 Girl.
Mentally Defectives attending Certified Schools	Pontville	1 Boy.
	Allerton Priory	3 Girls.
	Moor Park Special School.	59 Boys.
	Do. do. ...	51 Girls.

17.—MOOR PARK OPEN AIR SPECIAL SCHOOL FOR MENTALLY DEFECTIVE CHILDREN.

The number of children attending in 1927, and particulars of those discharged are shown in the following tables :—

	Boys	Girls	Total
Number on Books, 1st Jan., 1927	46	38	84
,, Admitted in 1927	13	13	26
,, Discharged in 1927	16	8	24
,, on Books, 1st Jan., 1928	43	43	86

Reasons for Discharge.	Boys	Girls	Total
Removed by Parent at 14	12	8	20
,, ,, 15	1	...	1
Removed by Parent and sent to former School	1	...	1
De-Certified and returned to Former School	1	...	1
Died	1	...	1
Total	16	8	24

Although the Authority can legally enforce the continuance at school of certified children until the age of 16, this power is not used at present. The position is involved in the same difficulties as the enforcement of the attendance at the special school of a child certified as mentally defective.

18.—SECONDARY SCHOOLS.

The number of children examined at the schools is as follows :—

Ages	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
Schools GIRLS :														
Park School	...	...	2	17	83	128	89	83	58	28	22	9	1	520
Winckley Square Convent ...	...	...	...	...	14	50	84	57	37	21	7	5	...	275
BOYS :														
Grammar School	1	4	8	8	29	65	56	50	51	25	19	5	1	322
Catholic College	...	...	...	18	42	43	48	42	43	12	12	4	...	264
Totals	1	4	10	43	168	286	277	232	189	86	60	23	2	1381

The defects and their prevalence expressed as percentages are shown in the following tables where it is seen that by far the most prominent defects are those associated with vision and teeth.

Ages	7	8	9	10	11	12	13	14	15	16	17	18	19	Total Defects
Malnutrition	...	...	...	1	1	...	1	...	...	...	...	1	...	4
Skin Diseases	...	...	...	...	1	...	3	2	1	1	...	...	...	8
Eye Diseases	...	...	1	4	14	24	28	21	22	4	3	1	...	122
Ear Diseases	...	...	...	1	5	4	2	3	2	1	1	...	...	19
Nose and Throat Diseases ...	...	...	1	4	10	13	15	8	6	3	2	...	...	62
Cervical Glands Diseases ...	...	...	...	...	3	6	...	3	2		...	...	...	14
Defective Speech	...	...	...	1	2	1	1	3	...	...	...	...	...	8
Dental Diseases	...	1	3	19	55	71	63	59	52	15	7	5	...	350
Heart and Circulation Dis. ...	...	...	...	1	3	4	2	3	2	1	1	...	...	17
Lung Diseases	...	...	...	...	1	...	...	1	1	...	...	...	...	3
Pulmonary Tuberculosis ...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Non-Pulmonary Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nervous Diseases	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Deformities	...	...	...	...	...	1	1	...	...	1	...	...	...	3
Other Defects	...	...	...	...	1	...	3	1	2	...	1	...	...	8
Total Examined ...	1	4	10	43	168	286	277	232	189	86	60	23	2	1381

Defects as percentages of numbers examined.

Defect	Park School	Winckley Square Convent School	Grammar School	Catholic College	Totals
Malnutrition	...	...	...	1·51	0·29
Skin Diseases	0·38	1·45	...	0·75	0·58
Eye Diseases	5·00	7·27	8·39	18·56	8·84
Ear Diseases	0·57	0·36	1·55	3·78	1·37
Nose and Throat ...	4·23	4·72	...	10·22	4·49
Cervical Glands ...	0·38	...	...	4·54	1·01
Defective Speech ...	...	0·36	...	2·65	0·58
Teeth	32·69	33·45	11·80	18·93	25·36
Heart and Circulation ...	0·57	1·45	...	3·78	1·23
Lungs	0·19	...	0·31	0·37	0·21
Tuberculosis	...	...	...	0·37	0·07
Nervous System ...	...	...	...	0·37	0·07
Deformities	...	...	...	1·13	0·21
Other Defects	1·15	...	...	0·75	0·58
Total Defects ...	45·19	49·09	22.05	67·80	44·6

HEIGHT AND WEIGHT.

The average height and weight of the children attending Secondary Schools is set out below together with a comparison with Elementary Schools at the same age and is also set out as a ratio per inch of height.

Average Height in inches.

Age ...	8	9	10	11	12	13	14	15	16	17	18
GIRLS.											
Park School ...	...	...	52·75	54·75	56·25	57·50	60·50	61·00	62·50	63.25	61·50
Catholic Convent	...	...	...	55·00	58·00	59·00	61·00	61.50	62·00	61·00	63·00
***Elementary School Children** ...	**46·94**	**48·71**	**50·60**	**53·01**	**55·48**	**56·81**	**58·93**	**60·26**	...	...	...
BOYS.											
Grammar School	50·00	52.00	53·75	54.00	56.50	58.00	61.00	62.75	65.25	67.75	...
Catholic College ...	...	...	53·75	55·50	56.75	58.50	60.25	63.50	67.00	66.50	66.00
***Elementary School Children** ...	**47·39**	**49·18**	**50·84**	**52·98**	**54·88**	**56·07**	**58·16**	**60·72**	...	...	...

AVERAGE WEIGHT IN POUNDS.

Age ...	8	9	10	11	12	13	14	15	16	17	18
GIRLS.											
Park School ...	...	...	64·25	73.00	82·00	90·50	98·50	102·75	114·50	120·25	111·25
Catholic Convent ...	...	...	...	70·50	81·50	89·00	100·50	104·00	121·50	121·50	119·00
***Elementary School Children ...**	**49·55**	**54·09**	**58·69**	**65·52**	**73·86**	**80·37**	**88·11**	**96·24**	...	...	...
BOYS.											
Grammar School...	63·00	64·50	63·50	67·00	75·25	79·00	94·00	104·00	113·50	160·00	...
Catholic College ...	...	...	67·75	73·50	77·75	85·50	98·50	111·00	131·00	126·00	119·00
***Elementary School Children ...**	**52·00**	**55·90**	**60·35**	**66·41**	**72·66**	**77·40**	**84·00**	**94·14**	...	...	...

*Arthur Greenwood : The Health and Physique of School Children, 1913.

AVERAGE WEIGHT PER INCH OF HEIGHT.

Ages ...	8	9	10	11	12	13	14	15	16	17	18
GIRLS.											
Park School	...	...	1·02	1·33	1·45	1·57	1·62	1·68	1·82	1·90	1·80
Catholic Convent ...	...	...	...	1·28	1·40	1·50	1·64	1·69	1·95	1·99	1·88
Elementary School Children	**1·05**	**1·11**	**1·16**	**1·23**	**1·33**	**1·41**	**1·49**	**1·59**	...	...	...
BOYS.											
Grammar School... ...	1·26	1·24	1·18	1·24	1·33	1·36	1·54	1·66	1·74	2·36	...
Catholic College	...	...	1·26	1·32	1·37	1·46	1·63	1·75	1·96	1·89	1·80
Elementary School Children	**1·09**	**1·13**	**1·18**	**1·23**	**1·32**	**1·27**	**1·44**	**1·50**	...	...	...

Age for age the girls at the Catholic Convent are taller than the girls at the Park School until we come to the smaller groups in ages 16, 17 and 18. On the other hand the Park School girls are heavier than the Convent girls up to the age of 14, when the picture is reversed. The weight judged as a ratio of a unit of height is in favour of the Park School girls up to 13 and in favour of the Convent girls after this age.

There is a similar slight advantage in height held by the Catholic College boys over the Grammar School boys up to 16 years, and a proportionately larger advantage in weight up to the same age. The ratio of weight per unit of height emphasizes the difference.

It is probable that the differences observed in favour of the Catholic Secondary Schools is due partly to the fact that they draw a larger number of scholars from the Rural area around the Borough than the Park and Grammar Schools, and that many of these will take a leisurely school dinner as against, in many instances, the hurried mid-day meal eaten by Borough children living at a distance from the schools.

There are but trifling differences in the height of boys and girls up to the age of 14, after which the boys gain a marked lead. Girls are heavier than boys up to 14, after which age the boys assume an easy superiority.

The very marked differences between the height and weight of Secondary and Elementary School children are arithmetical illustrations of the difference in environment, diet and, to a certain extent, in heredity. The function of the School Medical Service is as far as possible to neutralise the differences.

The work of medical inspection has been rendered pleasant by the cordial co-operation of the head masters and head mistresses. The necessary " following up " of reported defects has been done by them with satisfactory results.

TABLE I.

Return of Medical Inspections, 1st January to 31st December, 1927.

A.—ROUTINE MEDICAL INSPECTIONS.

	Number of Code Group Inspections		Total
	Boys	Girls	
Entrants	1251	1181	2432
Intermediates	696	709	1405
Leavers	900	892	1792
No. of other Routine Inspections	...	...	...
Total	2847	2782	5629

B.—OTHER INSPECTIONS.

	Boys	Girls	Total
No. of Special Inspections	87	73	160
No. of Re-Inspections	788	901	1689
Total	875	974	1849

TABLE II.

Return of Defects found by Medical Inspection in the year ended 31st December, 1927.

DEFECT OR DISEASE.		ROUTINE INSPECTION		SPECIAL INSPECTIONS	
		NO. OF DEFECTS.		NO. OF DEFECTS.	
1		Requiring Treatment 2	Requiring to be kept under observation but not requiring Treatment 3	Requiring Treatment	Requiring to be kept under observation but not requiring Treatment 5
Malnutrition		...	...	...	...
Uncleanliness	Head	...	...	...	...
,,	Body	...	...	...	...
Skin	Ringworm, Scalp	...	...	...	...
	,, Body	...	...	...	...
	Scabies	...	...	...	...
	Impetigo	2	...	...	...
	Other Diseases (non-tubercular)	5	1	...	...
Eye	Blepharitis	8	1	3	...
	Conjunctivitis	4	...	...	...
	Keratitis	...	...	...	...
	Corneal Opacities	...	...	...	...
	Defective Vision	390	70	85	4
	Squint	59	16	25	2
	Other Conditions	...	...	1	...
Ear	Defective Hearing	8	1	1	...
	Otitis Media	24	...	3	1
	Other Ear Diseases	1	1	...	...
Nose and Throat	Enlarged Tonsils	283	138	57	7
	Adenoids	22	10	6	...
	Enlarged Tonsils and Adenoids	6	4	4	...
	Other Conditions	5	8	2	...

Enlarged Cervical Glands (non-tubercular).		35	28	10	1
Defective Speech		...	1	...	1
Teeth :—Dental Diseases		86	4	5	...
Heart and Circulation	Heart Disease :—				
	Organic	...	1	...	...
	Functional	17	51	9	9
	Anaemia	26	2	4	...
Lungs	Bronchitis	96	42	4	2
	Other non-tubercular Diseases	21	11	2	...
Tuberculosis	Pulmonary :—				
	Definite	...	1	...	...
	Suspected	1	8	1	...
	Non-Pulmonary :—				
	Glands	...	...	...	...
	Spine	...	...	...	...
	Hip	...	...	...	...
	Other Bones and Joints..	...	...	...	...
	Skin	...	...	...	...
	Other Forms	...	2	...	...
Nervous System	Epilepsy	...	...	...	...
	Chorea	...	1	...	...
	Other Conditions	...	2	...	...
Deformities	Rickets	...	...	...	...
	Spinal Curvature	...	...	...	...
	Other Forms	1	1	1	...
Other Defects and Diseases		6	...	2	...

TABLE III.—Return of all Exceptional Children in the Area.

			Boys	Girls	Total
Blind (including partially blind).	(i) Suitable for training in a School or Class for the totally blind.	Attending Certified School or Classes for the Blind	4	2	6
		Attending Public Elementary Schools	...	...	...
		At Other Institutions	...	...	...
		At no School or Institution	...	1	1
	(ii) Suitable for training in a School or Class for the partially blind.	Attending Certified School or Classes for the Blind	...	3	3
		Attending Public Elementary Schools	2	2	4
		At Other Institutions	...	...	...
		At no School or Institution	...	1	1
Deaf (including Deaf and Dumb and partially deaf).	(i) Suitable for training in a School or Class for the totally deaf and dumb.	Attending Certified School or Classes for the Deaf	9	4	13
		Attending Public Elementary Schools	...	...	...
		At Other Institutions	...	...	...
		At no School or Institution	...	...	...
	(ii) Suitable for training in a School or Class for the partially deaf.	Attending Certified School or Classes for the Deaf	...	...	...
		Attending Public Elementary Schools	...	1	1
		At Other Institutions	...	...	...
		At no School or Institution	...	...	...
Mentally Defective.	Feeble-minded (cases not notifiable to the Local Control Authority).	Attending Certified Schools for Mentally Defective Children	59	51	110
		Attending Public Elementary Schools	28	23	51
		At Other Institutions	1	3	4
		At no School or Institution	...	...	...
	Notified to the Local Control Authority.	Feebleminded	...	1	1
		Imbeciles	18	19	37
		Idiots	8	4	12
Epileptics.	Suffering from severe Epilepsy.	Attending Certified Special Schools for Epileptics	...	...	...
		In Institutions other than Certified Special Schools	...	...	...
		Attending Public Elementary Schools	1	1	2
		At no School or Institution	2	4	6

EPILEPTICS (cont.).	Suffering from Epilepsy which is not severe.	Attending Public Elementary Schools	4	2	6
		At no School or Institution	...	...	...
PHYSICALLY DEFECTIVE.	Infectious Pulmonary and Glandular Tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	...	...	...
		At Other Institutions	...	...	...
		At no School or Institution	...	I	I
	Non-infectious but active Pulmonary and Glandular Tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	...	...	...
		At Certified Residential Open Air Schools	...	...	...
		At Certified Day Open Air Schools	I	4	5
		At Public Elementary Schools	II	7	18
		At Other Institutions	I	...	I
		At no School or Institution	...	I	I
	Delicate Children (e.g., pre or latent Tuberculosis, Malnutrition, Debility. Anæmia, etc.).	At Certified Residential Open Air Schools	...	...	...
		At Certified Day Open Air Schools	134	135	269
		At Public Elementary Schools	25	30	55
		At Other Institutions	...	...	...
		At no School or Institution	4	3	7
	Active non-pulmonary Tuberculosis.	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	...	...	...
		At Public Elementary Schools	3	I	4
		At Other Institutions	...	...	...
		At no School or Institution	3	...	3
	Crippled Children (other than those with active Tuberculous disease, e.g., children suffering from paralysis, etc., and including those with severe heart disease).	At Certified Hospital Schools	...	...	...
		At Certified Residential Cripple Schools	I	...	I
		At Certified Day Cripple Schools	...	...	...
		At Public Elementary Schools	56	60	116
		At Other Institutions	...	...	...
		At no School or Institution	20	7	27

B.—Number of individual children found at Routine Medical Inspection to require treatment (excluding Uncleanliness and Dental Diseases).

Group	Number of Children		Percentage of Children found to require Treatment
	Inspected	Found to require Treatment	
(1)	(2)	(3)	(4)
Code Groups :			
Entrants	2432	283	11·6
Intermediates	1405	284	20·2
Leavers	1792	411	22·9
Total (Code Groups)	5629	978	17·4
Other Routine Inspections...	...	...	...

TABLE IV.

Return of Defects Treated during the year ended 31st December, 1927.

TREATMENT TABLE.

GROUP I.—Minor Ailments (Excluding Uncleanliness, for which see Group V.).

Disease or Defect	Number of Defects treated, or under Treatment during the year.		
	Under the Authority's Scheme	Otherwise	Total
(1)	(2)	(3)	(4)
Skin—			
Ringworm, Scalp and Body	151	6	157
Scabies	7	...	7
Impetigo	684	5	689
Other Skin Disease	66	2	68
Minor Eye Defects—			
External and other, but excluding cases falling in Group II.	322	19	341
Minor Ear Defects	285	18	303
Miscellaneous, (e.g. Minor Injuries, Bruises, Sores, Chilblains, etc.)	2215	21	2236
Total	3730	71	3801

TABLE IV.—*Contd.*

GROUP II.—Defective Vision and Squint (Excluding Minor Eye Defects Treated as Minor Ailments—Group I.).

Defect or Disease	Number of Defects dealt with			
	Under the Authority's Scheme	Submitted to Refraction by Private Practitioner or at Hospital apart from the Authority's Scheme	Otherwise	Total
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including Squint) ...	917	24	25	966
Other Defect or Disease of the Eye (excluding those recorded in Group I.)	...	...	...	...
Total	917	24	25	966

Total number of children for whom spectacles were prescribed :—

(a) Under the Authority's Scheme	675
(b) Otherwise	39

Total number of children who obtained or received spectacles :—

(a) Under the Authority's Scheme	556
(b) Otherwise	39

The number of children who were provided with glasses by the Education Committee was 51.

TABLE IV.—*Contd.*

Group III.—Treatment of Defects of Nose and Throat.

NUMBER OF DEFECTS.

Received Operative Treatment.			Received other forms of Treatment	Total Number Treated
Under the Authority's Scheme, in Clinic or Hospital	By Private Practitioner or at Hospital, apart from the Authority's Scheme	Total		
(1)	(2)	(3)	(4)	(5)
531	13	544	96	640

TABLE IV.—*Contd.*

GROUP IV.—DENTAL DEFECTS.

(1) Number of Children who were :—

(a) Inspected by the Dentists :

Routine Age Groups. Aged :	
5......	—
6......	1752
7......	1968
8......	1079
9......	280
10......	36
11......	26
12......	37
13......	47
14......	8
15......	—
16......	—

Total ...	5233
Specials	2059
Grand Total	7292

	Routine	Special	Total
(b) Found to require treatment ...	2696	2059	4755
(c) Actually treated	1763	2059	3822
(d) Re-treated during the year as the result of periodical examination	379	...	379

(2) Half-days devoted to ...	Inspection	34	Total ...	932
	Treatment	898		
(3) Attendances made by children for treatment				7015
(4) Fillings	Permanent Teeth ...	10348	Total ...	10348
	Temporary Teeth ...	—		
(5) Extractions	Permanent Teeth ...	988	Total ...	4487
	Temporary Teeth ...	3499		
(6) Administrations of general anæsthetics for extractions...				631
(7) Other operations	Permanent Teeth ...	1652	Total ...	1652
	Temporary Teeth ...	—		

GROUP V.—Uncleanliness and Verminous Conditions.

(1) Average number of visits per school made during the year by the School Nurses		3
(2) Total number of examinations of children in the schools by School Nurses		21837
(3) Number of individual children found unclean—	Few Nits	3652
	Moderate Nits ...	2667
	Severe Nits ...	408
	Vermin	27
	Total	6754
(4) Number of children cleansed under arrangements made by the Local Education Authority		15
(5) Number of cases in which legal proceedings were taken :—		
(a) Under the Education Act, 1921		—
(b) Under School Attendance Bye-laws		—